

MANUFACTURERS' RECORD

A WEEKLY SOUTHERN INDUSTRIAL, RAILROAD AND FINANCIAL NEWSPAPER

Trade-Name Registered in the U. S. Patent Office.

VOL. LV. No. 4.
WEEKLY.

BALTIMORE, FEBRUARY 4, 1909

\$4.00 A YEAR.
SINGLE COPIES 15 CENTS.

Manufacturers' Record.

¹ PUBLISHED EVERY THURSDAY BY THE
MANUFACTURERS' RECORD PUBLISHING CO.

BALTIMORE.

RICHARD H. EDMONDS, President.
THOMAS P. GRASTY, } Vice-Presidents.
FRANK GOULD, }
VICTOR H. POWER, Treasurer.
I. S. FIELD, Secretary.

RICHARD H. EDMONDS,
Editor and General Manager.

EDWARD INGLE, Managing Editor.

ALBERT PHENIS,
General Staff Correspondent.

Branch Offices:

New Orleans—1012 Maison Blanche.

New York—52 Broadway.

Boston—170 Summer Street.

Chicago—1116 Fisher Building.

St. Louis—1023 Century Building.

Subscription, - - - - - \$4 a year
(payable in advance) to United States,
Mexico, Cuba, Porto Rico, Hawaii and the
Philippines.

To Foreign Countries (including Canada) in
the Postal Union, \$6.50 a year.

[Entered at the Baltimore Postoffice as sec-
ond-class matter.]

BALTIMORE, FEBRUARY 4, 1909.

VIRGINIA GOOD ROADS.

Gov. Claude A. Swanson of Virginia is co-operating heartily with commercial organizations, the State press and progressive individuals in the plans for a big convention at Richmond February 10 and 11, looking to the merger of the Greater Highways Association of South-eastern Virginia into the Greater Highways Association of Virginia then to be organized. President Charles T. Lassiter of the older association is working for a membership of 10,000 for the new association, and it is expected that at least 600 earnest workers for first-class highways will assemble at Richmond. Among the speakers will be Governor Swanson, Mayor David C. Richardson of Richmond; Major L. W. Page, director of public roads in the National Agricultural Department; Major W. W. Crosby, engineer of the Maryland Geological Survey; P. St. Julien Wilson, State Highway Commissioner, on what West Virginia has accomplished; Otto L. Evans, on the difficulties confronting good-road advocates in Virginia; Superintendent E. F. Morgan of the State penitentiary, on the road force, and others.

The Greater Highways Association should be supported with work and with money by every Virginian interested in the material welfare of the Commonwealth. A good beginning has already been made in the work of highway improvement, and though 39 of the counties have not done anything toward availing themselves of moneys for good roads provided by the last General Assembly, others are bestirring themselves

vigorously, and in 1908 seven counties issued bonds aggregating \$720,000 for permanent road improvements. The Richmond meeting should bring all the counties of the State into line for the good work and assemble a great body of public opinion calling for effective legislation for a broad and comprehensive plan of highway improvement.

HUSTLING, SURE ENOUGH.

The average man might be inclined to think that Pittsburg, and for that matter all Pennsylvania, was about as well supplied with manufacturing enterprises as necessary, considering the fact that Pennsylvania has about \$300,000,000 or \$400,000,000 more capital invested in manufacturing than the 14 Southern States, and yet in the "Classified Opportunities" advertising department in this issue the Western Alleghany Railroad Co. of Pittsburg is advertising for new industries seeking a location, and offering to give a free site and \$100 cash bonus for every employee of every new enterprise located. The same company likewise advertises in the "Classified Opportunities" department a location for a cement factory and offers a site free. The South must recognize that it has to face conditions of this kind in struggling to attract new industries and new capital.

When a railroad in the Pittsburg region is willing to give a free site and in addition \$100 bonus for every employee of every new factory established, surely the South will have to get up and hustle to keep up with the procession.

SPLENDID FINANCIAL SHOWING.

Mr. A. J. Gahagan, chairman of the finance committee, County Court, of Chattanooga, in calling attention to the issue of bonds of Hamilton county, in which lies Chattanooga, advertised in this issue, says:

When this series of bonds are issued the total bonded indebtedness of Hamilton county, Tennessee, will be \$525,000. The total assessed value of property for taxes in the county is approximately \$32,000,000.

In a later letter, giving some additional facts about this exceedingly interesting financial showing, Mr. Gahagan says:

Hamilton county at this time owes \$625,000 in bonds, \$300,000 of which will be due April 1, 1909. There is \$100,000 in the hands of the Sinking Fund Commissioners, which will retire that amount now outstanding. We have legislative authority to fund \$100,000 of the \$300,000 maturing April 1, and these are the bonds for which we sent you advertisement. The city of Chattanooga is a part of Hamilton county, and the city owes outstanding bonds \$2,581,000, that being a separate indebtedness from the indebtedness of the county. The county owns more public property in school buildings, humane institutions, hospitals and courthouse than its entire indebtedness. The county proper owes no floating indebtedness other than the bonds referred to above, except about \$75,000 that is unpaid on school buildings erected during the past 12 months. A large part of the bonded indebtedness of the city has been incurred in the last 18 months in building street sewers, schools, fire halls, city hall, etc.

AN OPEN LETTER FROM THE MANUFACTURERS' RECORD TO THE UNITED STATES STEEL CORPORATION.

Regardless of the influences which brought about your acquirement of the Tennessee Coal, Iron & Railroad Co., regardless of whether at the time of the purchase you even knew the full value of the property you were then securing or not, you now recognize that in buying the Tennessee Coal & Iron Co. you bought one of the world's greatest iron properties, not great in the sense of a developed property, but in the mineral resources to be developed. In that purchase you secured probably as much ore as the United States Steel Corporation owned in the Lake Superior district at the time of its organization, and several times as much coal as it then owned.

With far-seeing judgment, recognizing that the growth of the iron and steel industry will continue unabated, notwithstanding an occasional year of depression, you are building at Gary, Ind., a plant to cost \$75,000,000, to make almost as much iron and more steel than is produced in the entire South. The investment in your plant at Gary is probably equal to the entire investment in all the furnaces and steel works of the South, not counting the ownership of coal and ore lands. Your Gary plant is regarded as the very acme of human skill in method and equipment for producing iron and steel at the lowest possible cost after you have assembled the raw materials.

To your Gary plant you will haul your ore about 750 miles and your coke about 450 miles. Thus these two materials entering into the manufacture of iron will have traveled 1200 miles before they reach the furnaces. The development of the West, with great markets awaiting the product of the Gary plant, justifies such a vast expenditure in the building of what is doubtless the most perfect manufacturing plant ever constructed by human genius.

In the Birmingham district, against the 1200 miles which the coke and the ore must be hauled before they are wedded at Gary, they can be assembled after a haul of from 10 to 30, or 40, or 50 miles. Though the metallic contents of your Alabama ore is less than of the Lake Superior ore, the proximity of the fuel more than offsets this. Moreover, in Alabama your operations are unobstructed by weather. You can run your mines uninterruptedly 12 months in the year. In the Lake Superior district the mining and the shipping of ore are retarded during the winter months by the severity of the weather.

In the Birmingham district you have no such immediate market for the product of your plant as is now available in the Middle West. On the other hand, the creation of an industry creates a market for its output if the situation be wisely handled. In the territory which could be served from Birmingham you have probably a fourth of the railroad mileage of the country. You have a region of boundless potentialities—a country richer in natural resources than any other equal area in the world—a country whose development has scarcely begun as compared with its future. Though it may not at the moment provide for you a market for such a plant as that of Gary, the time is rapidly coming when it will do so. Nothing would so hasten that time and prove of such immense value to the whole South, and thus indirectly to the whole country, as the announcement that the Steel Corporation proposed to duplicate in the Alabama district a plant comparable to the greatest of its plants at Pittsburg or Chicago, or even at Gary. Such an announcement would be hailed throughout the world as marking a new epoch in Southern industrial history. It would give to the iron and steel consumers of the South the assurance that they would be justified in expanding their plants with the assurance of an abundant supply of their raw materials produced at a cost in keeping with the natural advantages of this section. Great as are the resources of the Alabama district, great as has been the progress made by the Tennessee Company under your management in the completion of its steel plant and in lowering the cost of steel-making, this section does not yet enjoy in the cost of production the benefit of its own natural resources. Nature has done much; man has done little as compared with the vast plants of Pittsburgh and Chicago and Gary. It is not to be expected that your company, or any other, can produce iron and steel in the South at the lowest possible point until the equipment in that section is equal to the best in the world. Then, and not until then, will it be possible to make the best use of the advantages of the vast stores of coal and iron ore and limestone in such close juxtaposition as in Alabama. Nothing that could be done by any group of capitalists would bring about greater benefit to the South and hasten its progress so much as your decision to build at a cost of many millions of dollars a plant commensurate with the resources of the district. This in itself would help to create a market for all the product of such a plant before it could be completed.

Looking beyond the home market, in the Southern States, there is the growing market in the West Indies, in Central and South America, and in more distant lands which could be reached from Birmingham and Southern ports to better advantage than from any other point of manufacture or export. Alabama's resources give to that State a rightful claim to produce and market the vast iron and steel products which the South and the Central and South American countries are consuming, and which they must consume in ever-increasing quantity. It is in the power of the Steel Corporation to prove a mighty factor in Southern development, and thus in the development and rounding out of the nation. It is true that the Steel Corporation has already been a great blessing to Alabama. It has already expended some millions of dollars in the completion of the plant under way when it bought the Tennessee property. It is true that it has made great progress, but so vast is the field, so great is the opportunity, that the MANUFACTURERS' RECORD would lay upon the heart of those who control the destinies of the Steel Corporation the responsibility to go forward in Alabama on a still greater scale. The men who have so wisely guided the policy of the

Steel Corporation since its organization did the South the greatest possible good by the purchase of the Tennessee property. In doing this they staid the panicky feeling then rapidly developing in Alabama, gave renewed confidence to the business interests of the whole South and gave to the world a final answer to the criticisms which for 20 years had hampered and restricted Southern iron interests in securing capital for development work. Then, and not until then, did the business world give real serious consideration to the possibilities of iron and steel making in this section on a scale commensurate with the resources of the South. Having done this, is it not now incumbent upon the Steel Corporation to go forward on a still larger scale and to plan for the building in that section of a plant as perfect, if not as vast in extent, as that of Gary? The MANUFACTURERS' RECORD is not unaware of all the difficulties which confront such a proposition. It does not minimize the obstructions. It believes, however, that the difficulties can be overcome, the obstructions removed and inestimable good wrought for the benefit of the Steel Corporation, the South and the country in the pursuit of such a policy, and in doing this work in the near future rather than waiting upon the indefinite future.

Very truly yours,

EDITOR MANUFACTURERS' RECORD.

IMMIGRATION.

In the light of eminently successful results of intelligent and persistent efforts for the past 15 or 20 years on the part of certain State officials, railroad agencies and other influences to direct a desirable class of immigrants to the South, and in the light of persistent efforts during the past five or six years, through Southern industrial or commercial congresses and parliaments, on the part of influences operating in this country at New York and Washington, to dump undesirables upon the South, the attempt to create an impression that a revolution in immigration for the benefit of the South is under way in consequence of the late Southern Commercial Congress at Washington is one of the jokes of the winter. Somewhat indefinitely one specimen of the recent epitaphs of the Congress conveys the following suggestions:

Information regarding the South was then not given to those asking about it as a future home, except in a distorted form, and the natural wave of immigration to this fertile section was seemingly checked forever.

The advent of the Southern Commercial Congress has knocked this plan of the immigrant holders out of commission. The lectures at the Congress by the country's most expert scientists on the subject, which lectures went broadcast all over the world, has awakened a storm of inquiry for the real "promised land" to congested Europe.

One may readily picture congested Europe falling all over itself to read the lectures of this country's most expert scientists on immigration, but in the meantime the facts are that well-established, legitimate agencies for the encouragement of immigration to the South are performing their functions with their accustomed vigor and apparently in utter ignorance of any advent of any Southern Commercial Congress. The Immigration Bureau of the State of Maryland reports much success in attracting desirable settlers, and the same thing is true of a like agency in the neighboring State, Virginia. Secretary H. H. Richardson of the Jacksonville Board of Trade tells the MANUFACTURERS' RECORD of a businesslike plan for settling the agricultural lands of Duval county, Florida. In December the Board of Trade rounded up a campaign of publicity by printing descriptions in Northern papers of the advantages of Jacksonville and its section. So many inquiries followed that at a conference of the board and the real-estate agents of the city it was decided to organize a company with \$25,000 capital to handle Duval county land in 5 and 10-acre tracts for intensive farming and to operate a demonstration farm. All agricultural listings will be turned over to this company, and to it the Board of Trade will refer all inquiries from homeseekers, investors and manufacturers. Mr. Richardson writes:

We believe that this move will be one of the most successful enterprises that we have ever undertaken, and will result in settling

up the vacant agricultural lands of Duval county within the next few years.

Correspondence from San Antonio, Texas, states that big land deals continue to be one of the features of Southwest Texas, and mentions among them the purchase of 125,000 acres of land in Webb county for colonization purposes by David P. Beels and George F. Ford of Kansas City and T. A. Coleman of San Antonio. Iowa capitalists have bought 200,000 acres of land in four Texas counties, which will be subdivided for farmers from Iowa and Illinois. An interesting sidelight upon immigration methods is given in a letter from President Edward Kennedy of the Altus, Roswell & El Paso Railway Co., who, writing from Altus, Okla., to the MANUFACTURERS' RECORD, says:

I counted in one day just 35 automobiles carrying homeseekers and prospectors going south out of Plainview down on our line to purchase lands and farms. They are coming from all over the United States and making investments.

That looks as though immigration agencies mean business and are furthering immigration upon business principles, and not depending upon schemes to unload upon the South the most undesirable elements of Europe, whether still in Europe or in the congested districts of New York, nor upon visionary plans for an impracticable million-dollar building in Washington, which of all places in the country has least reason for being the home of any permanent display or exploitation of Southern resources.

TWO ESTIMATES.

Mr. J. M. Brooks, general railroad contractor, writing from Molena, Ga., to the MANUFACTURERS' RECORD, says:

I have been a constant reader of the MANUFACTURERS' RECORD for several years, and I consider it one of the very best papers published in the South. No one who wants to keep abreast the times, and especially as to the South, can do without it. I believe your paper has had a greater influence for the upbuilding and development of the Southern States than all the others combined.

Cad Allard, secretary Chickasha Commercial Club, Chickasha, Okla., writes:

The MANUFACTURERS' RECORD certainly fills to perfection the field that it from the first was intended to cover. No publication ever reached higher in attainment of a great thought for good in this busy world than has the MANUFACTURERS' RECORD. No publication that comes to us from beyond the State's confines is capable of doing so much for Oklahoma as is the MANUFACTURERS' RECORD. Our State is new in the competitive field of manufacturing; hence the more liberal the circulation and use of the columns of the MANUFACTURERS' RECORD the more good will result to the manufacturing centers in particular and the State in general. We need it more than do the industrial centers of the old States. I have been studying the columns of the MANUFACTURERS' RECORD since assuming my duties with the Commercial Club, and I am sincere when I say that I expect the MANUFACTURERS' RECORD, through its news and advertising columns, to do more for Chickasha in the

future than all other publications combined. With her unlimited electric water-power Chickasha expects to become a great manufacturing center, and to do this she must lean heavily upon the MANUFACTURERS' RECORD.

EDUCATING CONSUMERS OF COAL

The educational value of a well-conducted advertising campaign is strikingly illustrated in some advertising which the Pennsylvania Coal & Coke Co. of New York is now doing in Eastern papers. The story which its advertisements carry is thoroughly interesting to the layman, whoever he may be, who uses coal. In a few brief, striking paragraphs the company tells about the quality of coal, how the glare of burning coal shows its character, and the value of using high-grade coal. Facts are given as to how this coal is mined, why it is uniform, how its chemists and its engineers, who are specialists in the burning of coal, follow the output of these mines with a view to securing uniformity, resulting in a premium being paid for this grade. The advertisement gives a very clear idea as to how different good advertising is from bad advertising. Hundreds of other coal concerns could tell the same kind of story, and do it in such a way as to greatly increase the demand for their output, and doubtless result in securing higher prices. But the average coal-mining concern seems to understand very little about the science of advertising and to have very little appreciation of its importance. Apparently the majority of coal operators say to themselves that "coal is coal," and that it is useless to undertake to educate the public by skillful and comprehensive advertising as to the merits of a particular grade of coal.

A good many years ago the Pocahontas coal people did some very skillful and intelligent advertising, making Pocahontas coal known all over the world. There are many other coal districts and coal companies which could to much profit follow the good work that the Pocahontas people did years ago, and to some extent are still doing, and which the Pennsylvania Coal Co. is now doing as to its particular brand of coal. Coal operators who fail to appreciate the value of the right kind of advertising, the advertising which educates consumers as to the merits of their coal, are missing a very great opportunity to increase their business and their profits.

FACTS.

A newspaper reader lately bemoaned his inability to find a daily paper which gives a simple statement of facts about the daily happenings of the world without bias or coloring. He wants facts, and not the views or theories of the writers who around one fact might throw a glamor of romance, or present a muckraking view, according as the particular writer might be impressed, or as his particular paper might wish the story covered. Many other people want the same thing. They want facts, not views or theories.

The MANUFACTURERS' RECORD tries to give facts in its editorial pages from week to week, and to give its views on many questions. Some readers may like our views, some may not, but there are more than a thousand concerns that are giving facts—facts of great interest to the public—in the advertising pages of the MANUFACTURERS' RECORD. These contributors tell about machinery for sale, about construction work for which they are equipped, about building materials, iron and cement and lumber and

bricks, about engineering work that they do or are willing to do, about bonds for sale and other financial facts. They tell about second-hand machinery as well as new machinery for which buyers are wanted, about rails, new and old, for sale, about electric lights and electric lamps, about the material for constructing mills, and about the equipment with which to run the mills. They tell about timber lands and coal lands for sale, about water-powers and about a thousand and one other things which bear upon individual and national life. It is a wonderful array of facts which are presented from week to week in these advertising pages, and the men who state these facts know so well that they are facts that they are willing to stand by their statements, and pledging the honor of their names as to their truthfulness, they all sign their contributions. There is nothing anonymous about the views expressed by a thousand or more advertisers. Knowing the facts about the stuff they have for sale, or the work they want to do, they are willing to share this knowledge with our readers. The wise man studies such facts. The thing that may not interest him today may interest him tomorrow. The machinery that he does not now want may be wanted next week. He stores his mind with facts not only about things needed today, but about things that may be needed in the weeks or the years to come. The wise man studies these advertising pages, with the brilliant array of facts presented, with care and thoughtfulness. He understands that he is getting the benefit of the best views on the subject most interesting to them of more than a thousand of the foremost business men of America.

If you have not been making a business of reading these facts—the facts so clearly stated in these advertising pages—do so. You will find a vast fund of information. When you write to any of the people whose names are signed to these interesting contributions, tell them that you saw the facts about them in the MANUFACTURERS' RECORD.

OKLAHOMA FAITH.

Director Charles N. Gould of the Geological Survey of Oklahoma has written for this week's issue of the MANUFACTURERS' RECORD a breezy article epitomizing the wonderful opportunities in the natural resources of his State. Incidentally he meets in a good-humored way the impressions prevailing in the East of general conditions in Oklahoma. We are sure that Director Gould's article will be read with interest everywhere. He emphasizes the faith in Oklahoma's future manifested in other parts of the country, as well as by Oklahomans themselves. Typical of the latter is the announcement made in last week's issue of the MANUFACTURERS' RECORD of a contract awarded by the Oklahoma Publishing Co. for the home of the *Daily Oklahoman*, representing an investment of \$220,000. This enterprising journal is published at Oklahoma City, which has already a population of 50,000. The new building, which will cost \$140,000, will be five stories high and 50x140 feet. It will be fireproof construction throughout, reinforced concrete faced with white Carthage stone and terra-cotta. Its vacuum steam-heating system will have automatic regulation, and electricity will be utilized wherever possible for light and power. In the basement will be the electric plant for driving presses and linotypes and for lighting purposes, and there, too, will be two quadruple

presses to cost \$50,000. The linotypes and other mechanical equipment will be on the fifth floor, while the second, third and fourth floors will contain the offices. The *Daily Oklahoman* is preparing to continue on an expanded scale the splendid work it has been doing for the development of Oklahoma.

AGITATION AGAINST MATERIAL INTERESTS REFLECTED IN FOREIGN TRADE.

One year ago the MANUFACTURERS' RECORD, dwelling upon the possible disastrous effects of legislation regulating the operations of railroads, suggested that there was food for serious thought in the figures comparing the values of American exports in the calendar years 1906 and 1907. A year ago the full effects in this country of the agitation, affecting, as it did, the commerce and industry of the whole world, had not been fully manifested. But the figures of our exports in the calendar year 1908 compared with those of 1907 are startling in their significance. The value of our exports in 1908 was \$170,592,958 less than the value in 1907, and actually \$45,410,187 less than that in 1906. With the exception of petroleum and its products and cottonseed oil, there is hardly an important item in our export list which did not show in 1908 a decrease in value from that of 1907, and there is little consolation in the fact that in some instances there was an increase in quantities exported. When hostile legislation, threatened or accomplished, forbids wisdom and common sense to venture investments in enterprises in this country calling for iron and steel and timber and other products, the home market not only for such products, but also for those entering into food and clothing, is narrowed and the financial energies shared by Europe and America are crippled, inducing general stagnation. It is, therefore, almost aphoristic to state that the falling off of our foreign commerce in 1908, the decline in imports and exports amounting to about half a billion dollars, was a part of a world-wide decline. The situation is a perfectly logical result of the agitation and legislation in the United States driving at the heart of production.

Dealing with the figures of exports of merchandise, a comparison of the movement at individual Southern ports in the calendar years 1907 and 1908 is made in the accompanying table:

Districts.	1907.	1908.
Alexandria, Va.....	\$2,500	
Baltimore, Md.....	99,410,342	\$82,113,496
Beaufort, S. C.....	126,360	140,690
Brunswick, Ga.....	12,820,894	13,387,838
Charleston, S. C.....	2,196,596	3,164,089
Georgetown, S. C.....	9,946,704	6,626,335
Newport News, Va.....	17,977	37,443
Norfolk-Portsmouth, Va.....	11,680,920	8,258,750
Richmond, Va.....	10,310,639	11,326,817
St. Johns, Fla.....	158,275	23,862
Savannah, Ga.....	993,413	610,518
Wilmington, N. C.....	65,147,543	53,748,092
Apalachicola, Fla.....	26,880,610	21,741,310
Galveston, Texas.....	317,558	263,093
Key West, Fla.....	196,627,382	202,162,408
Mobile, Ala.....	852,457	743,298
New Orleans, La.....	27,292,892	26,815,279
Pearl River, Miss.....	164,988,540	152,495,065
Pensacola, Fla.....	8,392,271	7,299,764
Sabine, Texas.....	19,233,341	18,705,397
St. Marks, Fla.....	9,855,151	13,976,062
Tampa, Fla.....	1,895,001	1,869,410
Braz. de Sant., Texas.....	3,222,615	4,083,666
Corpus Christi, Texas.....	233,519	142,349
Paso del Norte, Texas.....	14,387,097	8,993,324
Salina, Texas.....	10,368,026	5,661,901
Total.....	\$703,182,722	\$647,855,447
All districts.....	1,923,426,205	1,752,833,247

For many years it has been the pleasure of the MANUFACTURERS' RECORD to note a steady advance in the export trade of the country, to which the Southern ports have contributed in ever-increasing proportion. In 1908 there was a decline all along the line. Of 86 customs districts and ports of the country but 28 showed an increase in the value of their exports. Of these 28 but 8 were

Southern ports, namely: Brunswick, Ga.; Beaufort, S. C.; Georgetown, S. C.; Charleston, S. C.; Norfolk-Portsmouth, Va.; Galveston, Texas; Sabine, Texas, and Tampa, Fla. The increase at one Southern port—Galveston, \$5,535,026—was greater than that of any other port in the country.

This increase at Galveston was largely responsible for the fact that, barring the slight increase by \$2,400 at the interior ports of Denver, Col., and St. Louis, Mo., the Gulf ports showed the slightest percentage of decrease among all the groups of ports. The value of exports for the whole country decreased from \$1,923,426,205 in 1907 to \$1,752,833,247 in 1908, or by \$170,592,958, equal to 8.8 per cent., and for all Southern ports from \$703,182,722 to \$647,855,447, or by \$55,327,275, equal to 7.8 per cent. At all ports save the Southern ones the decrease was from \$1,220,243,483 to \$1,104,977,800, or by \$115,265,683, equal to 9.4 per cent. The increase at the two interior ports was from \$2,218 to \$5,227, or by \$2,409, and the decreases by groups were as follows:

North Atlantic—From \$916,670,741 to \$837,621,654, or by \$79,049,087, equal to 8.6 per cent.

South Atlantic—From \$239,092,773 to \$201,179,150, or by \$37,913,623, equal to 15.8 per cent.

Northern Border and Lake — From \$199,805,150 to \$170,012,693, or by \$29,792,457, equal to 14.9 per cent.

Mexican Border, Excluding Arizona—From \$31,302,431 to \$18,262,855, or by \$13,039,576, equal to 41 per cent.

Pacific—From \$93,832,908 to \$88,815,849, or by \$5,017,059, equal to 5.3 per cent.

Arizona—From \$9,931,806 to \$8,522,377, or by \$1,409,489, equal to 14.2 per cent.

Gulf—From \$432,787,518 to \$428,413,442, or by \$4,374,076, equal to 1 per cent.

It may be interesting to note in passing that in this year of diminished exports, with New York leading, with \$636,806,192, Galveston ranked second, with \$202,162,408; New Orleans third, with \$152,495,065; Philadelphia fourth, with \$95,799,564; Boston-Charlestown fifth, with \$84,365,536, and Baltimore sixth, with \$82,113,496. The value of exports at Galveston was nearly \$114,000,000 greater than the value at all Pacific ports and nearly \$33,000,000 greater than the value at all Northern border and Lake ports.

Bearing upon the question of quantity in exports, it may be noted that the only increase in animals—hogs—was accompanied by a decrease in value; that there were decreases in the quantity of corn, oats and wheat flour, and a slight increase in wheat, but a total decrease of nearly \$18,000,000 in the value of all breadstuffs. Exports of anthracite coal increased by 54,000 tons, and their value by \$317,000, and exports of bituminous coal decreased by 1,354,000 tons and their value by \$3,620,000. There were 300,309 more bales of cotton exported, but there was a decrease of more than \$30,000,000 in the value of cotton exports, while an increase of 56,000,000 yards of cotton cloths gave an increase in value of such exports of only \$2,000,000. The value of exports of iron and steel products fell off \$46,000,000, and a study of the tonnage of rails, structural iron and steel, wire, etc., and the number of locomotives and pounds of nails, pipes and fittings shows that the decrease in value was accompanied by a decrease in quantity. Wood and manufactures of wood fell off nearly \$15,000,000 in value, with the amount of lumber, for instance, decreasing by 322,000,000 feet.

The expenses to the people of the country of attempts to regulate by legislation the business of the people of the country are pretty clearly set forth in these figures.

IF ONLY TRUE.

A dispatch from Washington to the *New York Times*, referring to the investigation into the purchase of the Tennessee Coal, Iron & Railroad Co. by the Steel Corporation, says:

Copies of the last annual report of the Tennessee Coal, Iron & Railroad Company have fallen into the hands of the members of the Senate Committee of Judiciary. These reports contained the information that among the assets of the company are approximately 700,000,000 tons of iron ore, valued at \$1 a ton. The Coal and Iron Company was taken over by the Steel Corporation at a cost of \$30,000,000, thus netting the Steel Corporation \$70,000,000 profit in the value of the ore alone.

The owners of iron-ore properties in the South will be greatly rejoiced to know that the Senate committee in its wisdom has decided that ore in Alabama is worth \$1 a ton in the ground. Such a valuation has been put on Lake Superior ores by actual sales, but so far the South has not been fortunate enough to get anyone to put such a value on its ore properties. That the Tennessee Coal, Iron & Railroad Co. has approximately 700,000,000 tons of iron ore has been known for many years. It was known to the business world when Tennessee stock was being kicked around Wall Street for years at anywhere from \$75 to \$100 a share and at times at even very much lower figures. If the Senate committee did not know this until it saw this annual report, it didn't know what every other newspaper reader in the country has had the opportunity of learning a thousand times. Should the Senate committee be able to make the world accept a valuation of \$1 per ton upon Southern ores, what marvelous fortunes would suddenly come about! How the iron and the iron-ore companies of Alabama would jump into fabulous wealth surpassing even that made by the "Canny Scotchman" when he sold for \$500,000,000 what he had one year before tried to sell at \$100,000,000! The time may come when Southern ores will be worth \$1 a ton in the ground, but just now if they could be capitalized and sold at 25 cents a ton they would bring vast wealth to the stockholders of the companies fortunate enough to be owning in the aggregate far more iron ore in Alabama than that of the 700,000,000 tons owned by the Tennessee Coal, Iron & Railroad Co. They may be intrinsically worth \$1 a ton, but the public will not yet pay that price nor the fourth of it. The Senate committee, however, may hasten the time when this will be done by giving its semi-official endorsement of such a valuation, but the work of the Steel Corporation in taking the Tennessee Company out of the speculative class of stocks and developing its vast resources will be worth a thousand times more in that direction than the mare's-nest discovery of the Senate committee.

"NOO SAWTH" INTERPRETATION OF HISTORY.

Sympathy of men acquainted with the history of this country will go out to the women of Richmond Chapter, United Daughters of the Confederacy, in their protest against the award of the prize of the United Daughters of the Confederacy to a Minnesota student of Columbia University for the best essay on the South's part in the war

between the States. It seems that the essay assumed to be a present estimate of Robert E. Lee, and that it was awarded through a committee consisting of President Edwin A. Alderman of the University of Virginia, Prof. C. Alphonso Smith of the University of North Carolina and President J. H. Finley of the College of the City of New York. It seems that in the essay passed upon by these three men, whom the Richmond ladies call "the trio of learned historians," much that is laudatory of General Lee is woven around such assertions as the following:

He was a traitor in that he sacrificed all to aid the enemies of his country, etc.

But things which are technically of the highest criminality may at times be of the least disgrace. To do now what he did then would be treason, for the Civil War has since then taught what is right in this regard.

He differed from the greater Washington only in choosing the wrong side.

For, neither as the exponent of a form of patriotism which the results of the war have made treason, nor as the leader of a lost cause, could he attract anything but sentimental interest.

Alluding to the social order of the South at the opening of the war, this essay, passed upon by "the trio of learned historians," two of them natives of the South, asserts:

Intellectually the South was practically dead. Most of the people were densely ignorant; hence the great religious and educational movements which in the North had built a church and a schoolhouse at every cross-roads had swept by them unheeded.

The gentle folk of the United Daughters of the Confederacy have recommended that some explanation is due from "the trio of learned historians" in regard to this awful *contretemps*. They take the ground, apparently, that the prize competition was concerned with history; they call it a "historical essay," while President Alderman, if he has been correctly quoted, says that "he understood it to be his duty to select the prize winner on a basis of literary merit and structural quality. He did not understand that the selection should have been made from a historical point of view, although he differed radically from the essayist in certain statements made in the essay." It is hoped, if only from a historical standpoint, that this difference was as to the "treason" of Robert E. Lee. It hardly could have been very pronounced as to the estimate in the essay of the social order in the South before the war. That differs only immaterially from President Alderman's own estimate, judged by his historic, though hardly historical, oration, not as it has since been modified from time to time, but as it emerged into something more than local publicity at the Johns Hopkins University February 23, 1903. As reported at the time in Baltimore and in New Orleans, then the temporary home of President Alderman, his estimate of the old South included the following:

It was a land wherein a tumultuous love of liberty and of chartered rights existed side by side with dense, barbarous ignorance, wherein aristocracy and democracy went arm-in-arm together for the last time in human history. This system did not produce in any just degree either wealth or letters.

Here was the Middle Age clinging to the assured past and doubtful of the uncertain future. Here was the heroic tradition, with its attributes of feeling and spontaneity, and its stage setting of affairs and contest and heady enterprise, making its last stand in the new West against efficiency and correctness and form.

Forehanded, shrewd men, beaked and taloned graspers of the world, were not to be found in this society.

The fine reality, the sweet certainty of

life banished spiritual hunger and shut out the cries of the dwellers of the darkling plain. No man in that air could have written Emerson's address on the "American Scholar." But where else could Robert E. Lee have flowered into the rose of exaltation and tolerant and stately manhood?

The South has changed the emphasis of its thought from personality to social progress. It has made the change that every country makes that passes from the patriarchal to more complex forms of life. Its insistence is to be upon community of effort, upon civic progress, upon general well-being, rather than upon individualism. It has entered for good or ill upon its probation as a member of the modern world.

Whatever may have been the atmosphere responsible for the weird and somewhat original concept of the old South as not producing "In any just degree either wealth or letters" and as "the heroic tradition * * * making its last stand in the new West against efficiency and correctness and form," and of the South of today as entered "upon its probation as a member of the modern world," the atmosphere in which President Alderman has bulked during the past 10 years is hardly an atmosphere favorable to a philosophic judgment of Southern history, past or present.

That atmosphere has discovered Washington and Lee University, renamed to honor the memory of Robert E. Lee, conferring in 1906 the Litt.D. degree upon Oswald Garrison Villard, and Southern "educational leaders" uniting with Villard in a movement for raising a fund for a negro school in memory of one described in the memorial promotive literature as "a believer in the equality of all men, without regard to race, color or creed."

It was an atmosphere congenial to such participants in the entrance of the South "upon its probation as a member of the modern world" as Col. Thomas Wentworth Higginson, the whilom friend of John Brown of Harper's Ferry "martyrdom," and Colonel Higginson's first communion with "distinguished Southern educators" flourishing in the new atmosphere coincided with the publication of his bit of optimism:

As the memories of the slave period fade away the mere fetich of colorphobia will cease to control our society and marriage will come to be founded not on the color of the skin, but upon the common courtesies of life and upon genuine sympathies of heart and mind.

This atmosphere, colored with the fundamental stripe, "like training for whites and blacks," reverberates with the music of a \$43,000,000 Rockefeller Fund and a \$10,000,000 or \$15,000,000 Carnegie Fund, joyfully welcomed in a score or more Southern "institutions of learning."

Men absorbed in this atmosphere, especially if they never had opportunity to breathe another air, must not be harshly judged when they misinterpret history.

It is an atmosphere in which Robert E. Lee would have suffocated could it ever have risen to the heights upon which he and his people lived.

THE COTTON MOVEMENT.

In his report for January 29 Col. Henry G. Hester, secretary of the New Orleans Cotton Exchange, shows that the amount of cotton brought into sight during 151 days of the present season was 10,071,638 bales, an increase over the same period last season of 1,958,997 bales. The exports were 5,705,453 bales, an increase of 785,821 bales. The takings were, by Northern spinners, 1,697,380 bales, an increase of 769,382 bales; by Southern spinners, 1,206,900 bales, an increase of 8095 bales,

1908 PIG-IRON PRODUCTION.

A Falling Off of Thirty-eight Per Cent. from 1907 Output.

The American Iron and Steel Association has received from the manufacturers complete statistics of the production of all kinds of pig-iron in the United States in 1908, and has published them in its *Bulletin*.

The total production of all kinds of pig-iron in 1908 was 15,936,018 gross tons, against 25,781,361 tons in 1907, a decrease of 9,845,343 tons, or over 38.1 per cent. The following table gives the half-yearly production in the last four years in gross tons:

Periods.	1906.	1907.	1908.
First half.....	11,163,175	12,582,250	13,478,044
Second half.....	11,829,205	12,724,941	12,303,317
Total.....	22,992,380	25,307,191	25,781,361

The following table gives the production of pig-iron in the United States in half-yearly periods from 1900 to 1908 in gross tons. There was an increase in the second half of 1908 over the first half of 2,100,010 tons, or 30.3 per cent.:

Years.	First half.	Second half.	Total.	Increase or decrease.
1900.....	7,642,569	6,146,673	13,789,242	Dec. 1,485,896
1901.....	7,674,613	8,203,741	15,878,354	Inc. 529,128
1902.....	8,808,574	9,012,732	17,821,307	Inc. 204,159
1903.....	9,707,367	8,301,885	18,009,252	Dec. 1,406,482
1904.....	8,173,438	8,323,596	16,497,033	Inc. 150,157
1905.....	11,163,175	11,829,205	22,992,380	Inc. 666,034
1906.....	12,582,250	12,724,941	25,307,191	Inc. 142,691
1907.....	13,478,044	12,303,317	25,781,361	Inc. 1,774,727
1908.....	13,478,044	9,018,014	22,496,058	Dec. 2,100,010

The production of Bessemer and low-phosphorus pig-iron in 1908 was 7,216,976 tons, against 13,231,620 tons in 1907, a decrease of 6,014,644 tons, or over 45.4 per cent. In the second half of 1908 the production was 3,828,485 tons, as compared with 3,388,491 tons in the first half, an increase of 439,994 tons. The production of low-phosphorus pig-iron alone in 1908 amounted to 130,616 tons, against 204,537 tons in 1907. The production of Bessemer and low-phosphorus pig-iron in 1908 was the smallest since 1897, when 5,795,584 tons were made.

The production of basic pig-iron in 1908, not including charcoal of basic quality, was 4,010,144 tons, against 5,375,219 tons in 1907, a decrease of 1,365,075 tons, or nearly 25.4 per cent. In the second half of 1908 the production amounted to 2,528,532 tons, against 1,481,612 tons in the first half, an increase of 1,046,920 tons. The total production in 1908 was slightly less than that of 1905, when 4,105,179 tons were made.

The production of spiegeleisen and ferro-manganese in 1908 was 152,018 tons, against 339,348 tons in 1907, a decrease of 187,330 tons. The production of ferro-manganese alone in 1908 was 40,642 tons, against 55,918 tons in 1907. Of spiegeleisen alone it was 111,376 tons, against 283,430 tons in 1907. In addition to the above several hundred tons of ferro-phosphorus were produced in the second half of 1908.

The production of bituminous coal and coke pig-iron in 1908 amounted to 15,331,863 tons, as compared with 23,972,410 tons in 1907, a decrease of 8,640,547 tons. In the first half of 1908 the production was 6,578,370 tons, and in the second half it was 8,753,493 tons. A small quantity of iron made experimentally in Michigan with manufactured gas is included in the figures for the second half of 1908.

The production of anthracite and coke mixed pig-iron in 1908 amounted to 353,315 tons, as compared with 1,335,286 tons in 1907, a decrease of 981,971 tons. In the first half of 1908 the production amounted to 208,720 tons, against 144,595 tons in the second half.

The production of pig-iron with anthracite coal alone in 1908 amounted to 1694 tons, as compared with 36,268 tons in 1907.

The production of charcoal pig-iron in 1908 was 249,146 tons, against 437,397

tons in 1907, 433,007 tons in 1906, 352,928 tons in 1905, and 337,529 tons in 1904. The decrease in 1908 as compared with 1907 was 188,251 tons. A small quantity of pig-iron made with charcoal and electricity is included in the figures for 1908. In the first half of 1908 the production amounted to 120,220 tons and in the second half to 119,926 tons. No pig-iron was made in 1907 or 1908 with charcoal and coke mixed.

The whole number of furnaces in blast on December 31, 1908, was 236, against 168 on June 30, 1908, and 167 on December 31, 1907. The number of furnaces in blast at the end of 1907 was smaller than

1906.	1907.	1908.
11,163,175	12,582,250	13,478,044
11,829,205	12,724,941	12,303,317
22,992,380	25,307,191	25,781,361

at the close of any year since 1896, when but 159 furnaces were active. At the close of 1908 there were 223 idle furnaces, as compared with 276 idle furnaces at the close of 1907.

The blast-furnace status and the pro-

duction of pig iron by States are shown in the following table:

States.	Blast furnaces.			Total.	Production—Gross tons.		
	In blast June 30, 1908.	In.	Out.		First half of 1908.	Second half of 1908.	Total for 1908.
Massachusetts.....	0	1	1	2	5,230	8,574	13,794
Connecticut.....	2	2	1	3	376,208	643,287	1,019,495
New York.....	8	15	12	27	125,143	190,229	315,372
New Jersey.....	2	8	8	11	3,032,297	3,564,894	6,597,191
Pennsylvania.....	61	87	73	160	82,785	100,717	183,502
Maryland.....	2	2	3	5	137,356	183,102	320,458
Virginia.....	9	10	16	26	5,280	19,085	24,345
Georgia.....	1	2	2	4	605,617	791,397	1,397,014
Texas.....	1	0	4	4	27,901	37,659	65,561
Alabama.....	20	25	26	51	21,357	23,739	45,096
West Virginia.....	1	1	3	4	115,249	175,577	290,826
Kentucky.....	2	2	6	8	1,299,399	1,651,926	2,951,325
Tennessee.....	10	12	9	21	782,865	909,079	1,691,944
Ohio.....	23	39	34	73	167,063	181,033	348,096
Illinois.....	14	14	11	25	69,303	79,635	148,938
Indiana.....	1	3	0	3	154,981	158,090	313,071
Michigan.....	5	8	6	14			
Wisconsin.....	2	4	3	7			
Minnesota.....	0	1	0	1			
Missouri.....	2	2	0	2			
Colorado.....	2	3	3	6			
Oregon.....	0	0	1	1			
Washington.....	0	0	1	1			
California.....	0	0	0	0			
Total.....	168	236	223	459	6,918,004	9,018,014	15,936,018

DULL WEEK IN IRON.

Quotations Barely Established in the Birmingham Market.

Birmingham, Ala., February 1.

[Special Cor. Manufacturers' Record.]

There was no improvement in the market for iron the past week. Tersely stated, it about held its own. There was no change in prices and the volume of trade was not increased. There were sales here and there, but there was barely enough done to establish quotations. There were several bids on the market again for deliveries covering the first half of the current year, ranging from \$12.75 down to \$12.50. As far as can be learned, none of them were accepted, but it was an insistent rumor that some more of the resale iron had been sold on a \$12.75 basis for prompt delivery. All the interests had inquiry for the low grades, which were in great scarcity. One interest reported sale of 600 tons for near-by shipment, and another reported a sale of 400 tons, both being on the basis of \$13 for No. 2 foundry. These two lots were the largest lots reported. There were scattering sales of car lots and on up to the amounts just stated. Nothing was reported on a basis lower than \$13. In some of the offices there was strong complaint of the dullness of business, and it was freely stated that requests to delay deliveries were becoming more frequent. One is absolutely sure he is correct when he says of the market that it is very quiet.

were razed the past week, but the radical cut in values failed to secure an active trade. Quotations as furnished by Weller & Co. are as follows:

Old iron axles, \$16.
Old steel axles, \$15.
Old iron rails, \$15.25.
Old car wheels, \$13.
No. 1 railroad wrought, \$13.50.
No. 2 railroad wrought, \$12.25.
No. 1 country wrought, \$11.
No. 2 country wrought, \$9.50.
No. 1 malleable, \$11.
No. 1 machinery, \$11.
No. 1 steel, \$10.25.
Wrought-iron pipes and flues, \$10.25.
Stove plate, \$9.75.
Cast borings, \$6.

In the cast-iron pipe trade the conditions as reported in last letter still continue. There is an abundance of small orders coming in to the various plants, while there are lettings that amount to full 15,000 tons to be given out by several western points this month. It is as a matter of course written that the plants in this district will get their share. The prevailing price is yet \$24 f. o. b. Birmingham.

Several of the machine and foundry shops report a picking up of orders, which indicates a revival of trade prospects. The Hardie-Tynes Company reports shipment of a large heavy duty Corliss engine to San Francisco, and a heavy duty tandem com-

The prices of all the grades of scrap iron pound engine to Portland, besides two heavy duty engines of the same character to Tacoma. Then to the Saint Paul's Cotton Mill at Saint Paul's, N. C., it is shipping a large Corliss engine. It also has a contract with local interests that covers 350,000 pounds of castings.

The Birmingham Machine and Foundry Co. has of late secured a large contract for sugar-mill work reported for account of Louisiana parties. There are some to whom such favors have not yet come, and there are some to whom they are coming in small and broken doses. Take it all in all, there has been an improvement in general business, and among our conservative business men a feeling of confidence in the near future is being developed. Inquiries for investment properties are increasing of late, and new enterprises are being considered. More care and greater conservatism is being manifested in determining values of property that are offered for investment.

The weather that we have had of late has developed a fine demand for coal, and also for coke. There was one sale of the latter that aggregated 15,000 tons for account of Virginia ovens, operators of this district being the buyers. The price was around \$3.85. There was another sale that carried 3000 tons that went to Mexico.

J. M. K.

Subscribe to MANUFACTURERS' RECORD.
\$4 a year, or six months for \$2.

A GREAT SOUTHERN IRON ORE RESERVE.

By WILLIAM B. PHILLIPS, Mining Engineer, Birmingham.

[Written for the Manufacturers' Record.]

In the area drained by the Tennessee and the Cumberland rivers, after they turn north for their final run into the Ohio River, there is a region capable of supplying an enormous tonnage of brown ore for many years. It begins near the Ohio River, southeast of Paducah, and continues, of course, with some interruptions, to Northwest Alabama, a distance of 175 miles. In width it varies from two miles, as at Grand Rivers, Livingston county, Kentucky, to nearly 50 miles, as in the region in Tennessee north of the Alabama line. It is watered by two lordly streams, the Tennessee and the Cumberland, besides countless others of never-failing flow. It is covered with a magnificent growth of hardwood, such as oak, hickory, poplar, cottonwood, birch, maple, elm, cedar, etc. It comprises numberless valleys of the highest fertility, growing 50 bushels of corn, 30 to 40 bushels of wheat, two and three crops of alfalfa and other forage plants per acre, in addition to tobacco and other profitable crops. It is diversified by hills and plateaus, by gently rolling ridges and beautiful enclosed valleys. Its climate is not excelled on the American Continent. It is penetrated by four great trunk lines of railroad—the Illinois Central, the Louisville & Nashville, the Nashville, Chattanooga & St. Louis and the Southern. Its navigable streams give ready access into the heart of the country through the Mississippi, the Ohio, the Tennessee and the Cumberland. It is one of the garden spots of the world, and lies today comparatively untouched.

But it is not of its fertile valleys, of its boundless supplies of timber, or its vital connection with the very center of the country that I now speak. This region contains such reserves of iron ore as cannot be stated within any figures that would appear to be reasonable. These ores lie so favorably that they can be mined and prepared for market at an expense not exceeding \$1.25 a ton, with a content of metallic iron approximating 50 per cent. They are not Bessemer ores. They are ores suited for the manufacture of basic steel, which Mr. Charles Schwab says is likely to be the mainstay of the American iron and steel industry. According to this eminent authority, we are now witnessing the passing of the Bessemer steel industry and the oncoming of basic steel. If this be true, and there seems no sufficient reason for doubting it, the reserves of iron ore in this immense area will be called upon to supply this country with basic steel ores in enormous tonnage.

Mining in this region has been carried on for nearly 100 years, and yet the deposits of ore have scarcely been touched. The little charcoal furnaces that have long since disappeared, with a few notable exceptions, have not removed more than the half of 1 per cent. of the ore during their entire existence. The work done in connection with them has merely shown where the more accessible deposits were, without in the least disturbing their value. From the days of the Cedar Creek furnace, in Franklin county, Alabama, which went into operation in 1818, through the days of William Kelly of Cobb, of the Hillmans and many other illustrious and successful pioneers, down to the present operations at Center Furnace, Trigg county, Kentucky, where strictly cold-blast charcoal iron is still made after the ancient manner, these deposits have been drawn upon for the best iron that was ever made in the United States. It is doubtful if the most stringent specifications for

boiler tubes and boiler plate now prepared by the most exacting engineer are the means of producing any better iron than was made at the old Tennessee Rolling Mill on the Cumberland River by Daniel Hillman 50 years ago, situated, as it was, in the heart of a territory yielding such a variety of ores as enabled him to attain any desired mixture. This old mill, in its picturesque ruins, stands today as a monument to the sagacity, the perseverance and the practical skill of Daniel Hillman, easily the foremost producer of high-grade boiler plate in the country.

It was in this region also that another grand old pioneer won undying fame. It was at the old Eddyville furnace, near Eddyville, Ky., that William Kelly first refined iron by blowing into the molten metal a blast of ordinary air. When the Bessemer patents were taken out in this country, shortly after the Civil War, Kelly's claim for priority was allowed and he was paid a substantial sum and an annuity. In the application of this process for refining iron he anticipated the great Bessemer himself, yet each of them owed to Mushet the principles of recarbonizing. It detracts nothing from the reputation of Bessemer, who brought the process that bears his name to successful commercial use through his skill as a mechanical engineer, that he was anticipated by William Kelly in the discovery of the basic chemical principle involved in the production of ingot iron. That both of them were anticipated long, long ago by the Chinese is entirely probable.

In that part of Kentucky (Trigg, Lyon and Livingston counties) the old furnaces that used these splendid ores were the following: Eddyville, 1824-1840; Suwanee, 1843-1857; Center, 1843-1857, 1866-1877, 1880-1884, 1905; Mammoth, 1844-1861; Empire, 1845-1861; Fulton, 1846-1857.

In all of this region, extending from near the Ohio River to and beyond the Tennessee River, in Northwest Alabama, the ores are practically of the same kind, brown ores (limonites) held in more or less friable clays. For the most part the underlying rock is limestone, and the beds of ore-bearing clays occupy depressions in limestone, the so-called "pockets." These pockets are often of very large extent, and contain millions of tons of ore. The ore occupies the sides and tops of the hills and ridges, which attain an average elevation above the general drainage level of 50 to 150 feet. For the most part the trend of the ridges is northeast-southwest, but there are countless subsidiary ridges which bear in all directions, so that the topography is peculiarly favorable for cheap mining and the disposal of refuse. There is scarcely an ore district between the Ohio and the Tennessee rivers that fails to present ideal conditions for cheap stripping and mining by means of the steam shovel. There are many localities where three 30-foot faces may be worked in the same vertical height. In some localities limestone and brown ore may be worked in the same hill, as, for instance, on Mammoth Creek, Lyon county, Kentucky. At this place the limestone immediately underlies the ore, and the transition from one to the other is plainly to be observed.

The clays do not everywhere carry the ore in the same proportions, and there is no rule that can be applied with respect to the yield from any special locality. Ground can be profitably worked that yields one ton of ore from five cubic yards of material, while a yield of one ton from two to three cubic yards is frequently met

with. In places, as, for instance, near the Tennessee River in Decatur county, Tennessee, the ore occurs in great masses of almost solid ore and within half a mile of the river. This is the Bobs Landing ore, and it can be mined and loaded on barges for less than 50 cents a ton, the towage rate to Paducah being quoted at 12½ cents a ton. If the towage rate was 25 cents a ton this ore could be delivered at Paducah for 75 cents a ton, with an iron content of 45 to 50 per cent.

There are many localities in Kentucky and in Tennessee where the ore-bearing lands abut directly on navigable water that affords boating stage all the year. This is particularly true of the Hillman lands in Trigg and Lyon and Livingston counties, Kentucky.

In Decatur and Wayne counties, Tennessee, we have the same conditions of cheap mining and accessibility to navigable waters.

The ores in all of this region are to be mined and treated in about the same manner. The overburden of chert and barren material has to be removed by steam shovel. The ore-bearing clays have then to be mined in the same manner and thoroughly washed. The best modern practice will demand that the washed material (ore and chert) shall be crushed, sized and jigged in order to remove the chert. A simple washing process, such as is carried on in the ordinary log-washer, will not remove the chert from the ore. It does remove the clay from the ore, but not the chert. In some establishments the material from the washer is sent over picker-belts and hand-picked, but this procedure cannot be recommended for large operations or for those that have to sell ore on analysis. It is costly and inefficient at best. The material from the washer must be crushed, sized and jigged, each separate size being sent to its own jig. The fineness of the crushing will depend on circumstances, but it will be found that it is seldom necessary to crush finer than one cubic inch. Jigs that will handle material of one and one-half cubic inches are now in successful operation on brown ore.

The clays that occur with the ore are of many different kinds. They vary in color, in hardness, in plasticity, in friableness and in specific gravity. Where the ore is most abundant the clays are generally of a purplish color and the surface is covered with float ore. But there are many instances of good ore occurring in clays of lighter color and with very little or no float on the surface.

The color of the soil is a good indication, but it cannot be depended on at all times. Perhaps the most important consideration in connection with the clays that carry the ore is their behavior toward water. It understands itself, as our German friends say, that if the clays are highly tenacious, exhibiting a considerable degree of plasticity, they are not so easily disintegrated and removed by the strong current of water in the washer. They "ball up," to use a common expression, and show a decided inclination to enclose particles of ore. Calcining the clays before treatment would obviate this difficulty, but this, of course, is out of the question, for the delivery of 1000 tons of ore per day requires the treatment of 2000 to 3000 cubic yards of dirt. Many of these clays would make excellent sewer pipe and paving brick, tiles, etc., while the cream-colored and white clays can be utilized for the finer grades of clay products. The clay has to be removed to secure the ore, and whenever possible it should be converted into marketable products.

The conservation of our national resources will be attained only when we save everything that can be profitably

saved, whether in ore mining, coal mining, lumbering or what not.

In regard to these ores: To secure the greatest advantage from their use they should be calcined before going to the furnace, and this can be done by using the waste products from sawmills and the timber industry generally. After they are prepared for market and loaded on the cars they will contain about 7 per cent. of ordinary moisture and from 7 to 10 per cent. of combined water, i. e., such water as is removed only at red heat. If an ore that carries 45 per cent. of metallic iron also carries 7 per cent. of moisture and 7 per cent. of combined water it would carry 52.3 per cent. of iron if the moisture and the combined water were removed. We gain 7 points in iron by removing the water, and these 7 points are worth 70 cents in the sale of the ore. The usual price of a 45 per cent. ore is \$1.50 a ton f. o. b. mines; the price of a 52 per cent. ore is \$2.20 a ton. There are a great many localities in the region we speak of where a central washing plant could be located in the very heart of the timber reserves, or within easy distance of the lumber mills, and use the waste material from such plants for calcining the washed ore. These waste products are now giving lumbermen many anxious thoughts. They accumulate until it is a common sight to witness continuous fires for consuming what otherwise might be a menace to the establishment. This waste stuff cannot be transported far, it is not worth the freight, but it could be most advantageously used for increasing the value of the ore mined and treated within striking distances.

I have in mind now two very large properties with which I am familiar, one in Kentucky and one in Tennessee. Together they comprise something like 140,000 acres. They contain enormous reserves of brown ore and such wealth of timber as cannot be stated without seeming exaggeration. The ore lands and the timber lands are in immediate proximity, the line dividing them being purely imaginary. These ores lie within easy touch of two great rivers, the Tennessee and the Cumberland, and in a region penetrated by three trunk lines of railroad. The ores they could supply are in constant demand at remunerative prices, and yet they are not being developed. Perhaps they are losing nothing of their value by lying fallow, perhaps they are; we are not discussing this phase of the matter now. The point is that they are now in demand, whatever may be the case in the future. They lie in the very heart of the country, and within a freight zone that would allow of a 300-mile haul to furnaces that are fairly begging for brown ore. Now is the time to get at these ores, so that when the greater demand for this kind of ore is insistent (and this time is not far distant) the preliminary work will all have been done and a steady supply of excellent ore assured to the makers of high-grade foundry iron and basic iron for the steel furnace.

There are problems in connection with these great ore reserves that cannot be settled in a day. These ores cannot be mined by steam shovel and loaded direct on cars for immediate shipment to points of consumption. There are two things that have to be removed from them before they become uniformly acceptable to iron-makers, viz., clay and chert. Iron producers are certainly right in their demands that these ores, and, in fact, all ores, should come up to a recognized standard of quality. If a given ore can be brought up to 50 per cent. of iron they are warranted in demanding that it shall be so brought. The question of improving the quality of the Clinton ores of the Birmingham dis-

trict does not now command much attention, but with the brown ores the case is radically different. They can be improved, and greatly improved, at a comparatively small expense, and this improvement should take the form of increasing the content of iron and assuring a uniform quality of ore. The 800,000 tons of brown ore now used in Alabama every year does not contain more than 344,000 tons of iron, whereas it should contain 400,000 tons, and the 56,000 tons representing the difference is worth now more than \$700,000. This \$700,000 represents the difference between the brown ores as they are and as they might be made. It may be allowed that the cost of raising the grade of this ore from 43 per cent. to 50 per cent. will be 25 cents a ton, or \$200,000 for the 800,000 tons, so that the seeming difference is \$500,000 a year, instead of \$700,000. The real difference is, indeed, larger than this, for the better ore is more cheaply handled and more cheaply smelted, and the gains in these two items are to be added to the seeming difference.

Mr. Schwab says that the coming steel is basic steel. In connection with this it may be said that the coming ore in the South is brown ore. It is not meant by this that brown ore will supersede the Clinton ore as basic steel will supersede Bessemer steel. The latter change will be seen much sooner than the former, and yet it is no more certain. The advantages of using brown ore run hand in hand with those that are compelling the substitution of the basic process in steelmaking for the Bessemer process; they are based on the cost sheet as referred to excellence and uniformity of product. In the case of basic steel there is another question that comes into play, and that is the exhaustion of the high-grade Bessemer ore deposits. Each year sees not only a restriction of the iron content in such ores, but a decided tendency toward higher phosphorus. The Bessemer process is losing ground, not because the basic process is cheaper, but because the low phosphorus ores required for it are becoming steadily scarcer. The country has felt the enormous strain that has been put on these ores, and we are now facing a restriction of their output in order that the Bessemer converters in operation may not be put out of commission.

There are still high-grade Bessemer ores in the South that have hardly been touched, as, for instance, in East Tennessee, in Western North Carolina and in Central Texas. They constitute the Bessemer ore reserves within the South, but they produce very little ore, and are not now to be considered in this connection.

The future ore of the South is the brown ore, just as the steel of the South is and will be basic steel. The two go together, and in calling attention, in this brief and imperfect manner, to an ore reserve of practically inexhaustible tonnage I am not posing as a prophet, I am merely stating a proposition that is as clear as noonday to all who have taken the trouble to acquaint themselves with the facts. Basic steel and brown ore—upon these two will rest the great structure of the Southern iron industry.

TWO TEXAN CITIES.

Typical of the Many Activities of the Great State.

[Special Cor. Manufacturers' Record.]
Quanah, Texas, January 25.

Terrell is in the north part of Kaufman county (the largest town in it), at the crossing of the Texas Midland Railroad and the Texas & Pacific. The population is 8000, with 130 business houses, aggregating an annual business of about \$4,750,000; three banks, a daily and two weekly newspapers, cotton-oil mills, com-

presses, six gins and a cotton warehouse, electric-light plants, water-works, lumber yards, planing mills and a peanut-oil factory. The North Texas State Insane Asylum, one of the largest in the South, having accommodations for 2200 patients; Terrell University, five private schools, seven churches, a library and an Elk lodge are here. Mr. T. B. Griffith of the firm of Griffith & Griffith, says:

"We have here a growing city, with plenty of room for enterprising men with capital. Our average cotton receipts are 45,000 bales. We are situated in the midst of a rich sandy and black sandy country, adapted to the staples, cotton, corn, wheat and oats, as well as fruits and vegetables. Truck farming is quite extensive in this part of the country. There is needed here a cotton factory, a woolen mill, a creamery and cheese factory. Land is cheap now, but is rapidly enhancing in value, and will double in price within the next few years. Commercial timber is plentiful and cheap only a few miles from Terrell on both the railroads. There is plenty of timber everywhere for domestic use. We are one of the healthiest cities in Texas, our annual mortality rate for the past 10 years having been only three-fourths of 1 per cent."

Terrell has one electric-light plant, and the construction of another will begin soon, two water-works systems, two telegraph offices and one telephone system; free mail delivery and eight rural routes; a sewerage system and an appropriation of \$50,000 for a modern postoffice building.

With three strong banks with \$500,000 capital and \$1,629,000 deposits, 130 business houses, a population of 8000, steadily increasing, there is no reason why this beautifully and healthily located city in Texas should not continue to grow in commercial and manufacturing importance.

Gainesville is a flourishing little city of 15,000 inhabitants, and is six miles south of Red River, on an undulating plain, which is 733 feet above sea level. The city has grown steadily and substantially, so that the first impression it gives the visitor is that of thrift, cleanliness and activity along all lines. The city is surrounded by a country which can support a city of 50,000 as easily as one of 10,000. The soil is very fertile and the farmers are diversifiers.

There are 50,000 people in Cooke county, of which Gainesville is the county-seat, and 80 per cent. of them are Americans. Among this number are quite a number of thrifty Germans, and they have made most excellent citizens. Gainesville and Cooke county are going after enterprises in a manner most commendable. The people of the county do not leave all of this work for the town to do; the farmers and stock-raisers have bank accounts, and they consider everything from a business standpoint, always showing a willingness to help in laudable enterprises. Cooke county produces cotton bringing from \$25,000 to \$35,000 bales to the city of Gainesville each year. The compresses handles between 75,000 to 80,000 each season, making Gainesville the largest cotton-shipping point in North Texas.

Gainesville has a big modern gas plant; large cotton compresses; four cotton gins; three big machine shops; flour mills; oil mills; cannery (12,000 cans daily); pressed-brick plant; large iron factory; bit and spur factory; saidiron factory—besides a score of smaller factories. Asphalt beds are nearby, and natural gas is only six miles away, with coal and lignite adjacent. Three strong banks, with deposits of over \$2,500,000, attest financial strength. Miles of concrete sidewalks and miles of macadamized streets show that the people are alive to beautifying the city.

An interurban railway now building to Sherman, with two projected railways, will give the city splendid transportation facilities. Mr. Jas. R. Bell, one of the leading men of the city, says:

"All we need is an influx of capital and good industrious people to come in and take hold with us and realize the profits with our people. Our rich back country, with its fertile soil, is a great factor in our growth."

The secretary of the Commercial Club says:

"A large number of inquiries are being received daily asking about Gainesville and her advantages and resources. The fact that Cooke county took the first prize on county exhibits at the State Fair of Texas in 1908, besides seven blue and six red ribbons on products, indicates we have much to congratulate ourselves upon."

A projected railway line to Chickasha, opening up a virgin territory as rich as the Nile valley, besides the great agricultural country through which it will run, containing great beds of asphalt and natural gas, will give additional wealth to this section, and with preliminary surveys for a steam road to Mineral Wells, there will be still greater opportunities for the creation of wealth in and around Gainesville.

ALEXANDER HELPER.

INDEPENDENT FARMERS.

Diversification of Crops the Secret of Success.

G. A. Baumgarten, superintendent and manager the Schulenburg Oil Mill, Schulenburg, Texas, writes to the MANUFACTURERS' RECORD:

"Our little city has built and is building about 15 modern residences costing from \$3000 to \$10,000, and is also making improvements in the way of modern store fronts. The municipality has thoroughly graded all streets, put in sewer pipes, laid road crossings on every street and is now extending the water mains.

"We have more than 100 farmers using the creamery which was built here three months ago. It buys all the cream in this vicinity and at neighboring points, and turns out 600 pounds of butter at one churning every few hours. It is a great success, and separators are being sold daily in this vicinity by agents for more cream. The capital of this Yellow Rose Creamery is owned by two farmers' sons.

"I have just been advised that the canning factory has closed its contract, which will be quite an item for this community. The principal stockholders are all farmers.

"This is a strictly German settlement of industrious farmers who always have something to sell instead of going in debt at stores for the necessary articles used at home. So our farmers are prosperous even if we did have three small cotton crops in succession. This shows that by diversifying crops the farmers are able to take care of themselves and to build factories without any other aid. I have noticed for more than 20 years that the German farmer sells hams, sausage, bacon and lard instead of going to the stores and buying Western products of the kind. Our market has always had an ample supply of eggs, chickens, turkeys and vegetables, and at times eggs, etc., are shipped to the East in solid carloads. This is known as the greatest egg and chicken market in Texas. Thousands of turkeys are dressed here annually, but that is only a small item compared with eggs, chickens and other country produce. Vegetables of all kinds have been shipped daily except during the recent and unusual cold snap, and plenty of cabbage and cauliflower stood the severe spell.

"A good living can be made in the South without raising cotton. I have just set out 100 Satsuma orange trees, which are

doing finely, and I intend to increase my orange grove by four acres a year.

"G. E. Ruhmann & Bro. have moved into their new headquarters, as their old plant for building patent steel furnaces was entirely too small. They bought their wants for their present factory, which now employs 25 men, through an advertisement in the columns of the MANUFACTURERS' RECORD, and are well pleased with the inquiries they received."

Mercedes Canal in Texas.

One of the important irrigation enterprises of Texas is the Mercedes Canal. Interesting references to it and the developments it has caused were made last week by Wm. Doherty, traffic manager of the St. Louis, Brownsville & Mexico Railway, who is quoted by the St. Louis *Republic* as saying:

"The Mercedes Canal, being built with St. Louis capital in the Brownsville district, Texas, by the American-Rio Grande Land & Irrigation Co., has been completed from a point opposite Ensenada, Mexico, 30 miles northward, and is in daily use.

"To every mile on this canal there are five miles of laterals, and on either side where, prior to 1907, there was barren waste. It is probable another year will be required to complete this particular branch of the canal, after which it is the intention of the company to extend the waterway in other directions.

"The building of irrigation canals in the Brownsville district has been the means of taking many hundreds of people there, the majority of whom have taken up 40-acre tracts and are prospering. Last year the St. Louis, Brownsville & Mexico Railway hauled 804 carloads of vegetables out of the district irrigated by the Mercedes Canal. This number is expected to exceed 2000 during 1909.

"The Mercedes Canal already represents an outlay of about \$800,000, and when completed will furnish water for irrigation purposes throughout 125,000 acres owned by the company.

"The canal is 120 feet in width and 15 feet deep. Along the banks of the main canal and laterals, instead of a waste, as was the case a few years ago, are trees and farms, the latter yielding excellent crops each year. Last year there were 11,600 homesteads taken out in the Brownsville district.

"Sugar-cane planted along the Mercedes yields more than the fields of Louisiana, and it is of superior quality. The crops require to be planted only once in from five to seven years, instead of every other year, as in Louisiana.

"In 1907 between Robstown and Harlingen, Texas, almost 200 miles, there were five white families living. Since the railroad connecting the towns was completed, however, many prosperous towns have sprung up. The branch from Harlingen to Sam Fordyce, which traverses the irrigated district of the Mercedes Canal, also has built up wonderfully.

"The people who are immigrating to the Brownsville district are of the better class. They have for the last year been coming from Indiana, Ohio, Pennsylvania and other States, and when once they have taken out their tracts and got down to good hard work the result of their labors soon makes itself manifest. There are comparatively few foreigners. Those who already are there are prospering. They are of the better class, too, and we expect those to come will be entirely acceptable."

For Attention of Architects.

R. R. Barrow, 1410 Valmont street, New Orleans, La., wants correspondence from architects relative to plans for a \$10,000 to \$15,000 residence.

THE TRUTH ABOUT OKLAHOMA.

By CHAS. N. GOULD, State Geologist.
[Written for the Manufacturers' Record.]

I recently visited several Eastern cities, including Baltimore, Pittsburg and Washington, and had the opportunity of meeting a number of prominent business men. I was surprised and often somewhat chagrined to find that a number of wrong impressions are prevalent regarding Oklahoma and its inhabitants. Many people imagine that this is a land of Indians and cowboys; that every man who doesn't carry a tomahawk certainly wears a blanket, or at least a sombrero.

In point of fact, in two-thirds of the towns in Oklahoma an Indian is as great a curiosity as in Baltimore, and much more so than in Washington. Oklahoma's population is a little more than 1,500,000, of which about 70,000 have Indian blood, and of these the greater part are persons of mixed blood. For instance, Senator Owen is a citizen of the Cherokee Nation and Congressman Carter is a Choctaw citizen. Many of our most progressive citizens and business men, whose wealth is often counted by the hundreds of thousands of dollars, are of Indian blood.

Another idea which I find very prevalent in the East is that Oklahoma has been the victim of a superabundance of freak legislation. This impression has been furthered by the yellow-journal press and so thoroughly ventilated in a certain class of newspapers that even the persons who have been most active in promoting the notion are now believing it. For instance, I find that two ideas are everywhere prevalent: First, that Oklahoma has a nine-foot bed-sheet law, and second, that Oklahoma has a bank deposit guaranty law. To both of these charges the people of the State beg to plead guilty.

The so-called nine-foot bed-sheet law is, in fact, only a part of a hotel-inspection law which was drawn by and passed on the recommendation of the United Commercial Travelers of America. The law provides for the inspection of hotels, and one clause relates to bed sheets. The law was first passed in Texas some years ago, and it seemed to be very effective. The United Commercial Travelers have proposed the same law in a number of other States, and it will probably be passed by some of them the present winter.

With regard to the bank deposit guaranty law, it may be admitted that this law is more or less of an experiment. So far it has proved a success. There have been only three bank failures in Oklahoma since the law went into effect, and in each case the depositors have been paid in full within 48 hours. As a result of the passage of the law bank deposits have greatly increased, and money which heretofore had been hoarded is now on deposit in the banks. A large amount of money has been brought into Oklahoma from adjoining States and placed on deposit in the guaranteed banks. The people, at least, believe that their money is safe. The fact that other States are now considering a bank-deposit law based upon the Oklahoma plan would seem to indicate that it is at least worth a trial. However, it may be said that Oklahoma is not wedded to this or any other law. If it does not prove a success it will certainly be repealed. A bill now before the Legislature provides for a modification of this law. But it must be remembered that because a thing has never been tried anywhere else is a pretty good reason for trying it in Oklahoma.

The impression seems to be abroad that Oklahoma is antagonistic to capital. This idea is entirely erroneous. Oklahoma welcomes capital, and is very anxious to have investments made in the State, but the

people of Oklahoma intend to see to it that they have at least some control over the capital, and they have no intention of being bound hand and foot by corporations.

This fact is well illustrated by the work of the Corporation Commission in dealing with railroads. A single instance will be cited: In a small town in Southern Oklahoma the railroad station was built on the opposite side of the track from the town, and between the main line and the town was a switch. It so happened that a great many freight trains used this switch, and frequently a freight was on the side-track when the passenger trains came in, so that all the people had to do, if they came down to the passenger train a little late, was to climb over the freight train in order to get on board. The people had petitioned the railroad company in vain. Finally they brought the matter to the attention of the Corporation Commission. An order was issued to the effect that the railroad company must either take out the switch or move the depot across the track. They took out the switch. The people of the town were really very much surprised to learn that they actually had some rights in the matter, and that there was some power that the railroad company would respect.

There is perhaps no part of the United States today where opportunities for safe investment are better than in Oklahoma. All things considered, it is probably the wealthiest portion of the Union. The soil is extremely fertile, and has never been exhausted by cultivation, and the climate is favorable to the production of a large number of crops. For instance, Oklahoma has three staples—corn, wheat and cotton. Two years ago the green bug destroyed the wheat in Oklahoma and Kansas. The farmers of the latter State had but one option, namely, to plow up the ground and plant it to corn; the Oklahoma farmer had two chances for a crop—corn or cotton. It so happened that corn did not make a good crop that year, but cotton did.

All kinds of fruits and berries do well. To cite a single example: Elberta peaches as large as a pint cup were a drug on the market last summer at 50 cents per bushel. Oklahoma apples took prizes in competition with the best of the country at the St. Louis Fair and at Spokane. Pears, apricots, plums, cherries, and, in fact, all fruits indigenous to the Mississippi Valley thrive well.

In mineral wealth Oklahoma is not excelled by any other State. She has deposits which are practically inexhaustible of a dozen or more valuable mineral products. The fuel supply is, so far as known, larger than that of any other State. Last year she produced 50,000,000 barrels of oil, and there are hundreds of millions of cubic feet of gas shut in. The oil and gas field is just beginning to be developed. The amount of coal will probably reach 10,000,000 tons.

The asphalt deposits are among the largest in the United States; of gypsum there are something over 120,000,000,000 tons; salt water enough going to waste to make 100 carloads of salt a day; of lead and zinc there is probably as much as in either Missouri or Arkansas. Granite of a dozen varieties make up mountains 60 miles long; marble as fine as that from Georgia or Vermont occurs in quantity. Also fine deposits of glass sand in ledges extending for a distance of 50 miles across the country, with sandstone and limestone, clay and shale, all in inexhaustible quantities. There is some iron, plenty of tripoli

and a number of rarer substances, such as volcanic ash and novaculite, and probably some gold and silver.

All of these things remain to be developed. A little coal is being mined; a little oil and gas utilized. There are eight plaster mills and two Portland cement plants in the State. A little asphalt is being taken out, and a little marble and granite are being quarried, but in every instance only a very small beginning has been made.

The cities have shown a wonderful growth. Oklahoma City now has 50,000 people. Ten years ago Muskogee consisted of a few traders' shacks; it now has 30,000 inhabitants. Shawnee, Enid, Guthrie, McAlester, Ardmore, Chickasha and Tulsa have all the way from 10,000 to 20,000 population, and a score of towns have all the way from 5000 to 10,000. All these cities are growing rapidly, and with the advent of Statehood and the development of the resources they will continue to grow for a number of years.

Farm lands are as yet relatively cheap. In a considerable part of Eastern Oklahoma land that is as good as the best of Illinois or Iowa land, and which contains coal, and probably oil and gas, can be purchased at the rate of from \$10 to \$20 an acre. Much of this land lies near growing towns, and some of it contains deposits of limestone, shale and sandstone, which will be valuable for building material.

The citizenship in Oklahoma is in general above the average. Immigration from such States as Kansas, Texas, Missouri, Tennessee, North Carolina, Iowa and Illinois has been large, and there is not a State in the Union not represented in Oklahoma.

With this vast array of natural resources, both agricultural and mineral; with the fertile soil and favorable climate, with the superior class of citizens, and with a constitution and laws guaranteeing to these citizens protection from corporations, there is no reason why Oklahoma's developments should not continue to increase rapidly.

Norman, Okla.

PINE SHAVING PAPER.

Plant at Orange, Texas, to Triple Its Capacity.

[Special Cor. Manufacturers' Record.]

Orange, Texas, February 1.

Out of all the various and multitudinous efforts that have been made to utilize the waste from yellow-pine sawmills, the one first and real commercial success that stands forth is the yellow-pine paper mill of this place, which makes paper out of the shavings from the planing mills. It is now marketing at profitable figures an output aggregating \$175,000 a year, and is arranging to enlarge the plant to three times the present capacity. This will represent a total investment of about half a million dollars and will give a nominal capacity of 30 tons a day. The product is wrapping paper of a high grade solely—No. 1 pure fiber wrapping paper it is called—which brings a higher price than news and is more profitable to manufacture, and the output is marketed mainly in Texas, although some is shipped to St. Louis and Kansas City. The near-by trade is sufficient to tax the capacity of the plant, however. There is no difficulty at any time in marketing the entire product. Even during the dullness of 1908, with the mill running night and day, the output was almost continuously six weeks behind the orders.

To Col. W. H. Stark, president of the great Luther & Moore Lumber Co. of Orange, the credit is largely due for the success that has been made. He has stood

behind the enterprise with his vast means from the very inception, and has never wavered in the determination to make of it a success. His associates are mainly men connected with the lumber company here, so that the enterprise is purely an affair local to Orange, and as such is a matter of much credit to this city of palatial homes, growing commerce and promised importance as a deep-water port, with a prospective 25-foot waterway to the Gulf.

The industry began with the purchase and removal here, some six weeks ago, of a part of the machinery that had been used in a futile attempt to make paper from sawmill refuse at Pensacola. A company was formed at Orange with \$100,000 capital. E. G. Goodall, a paper mill man from Michigan, was secured as manager, and pending developments was president of the company, then called the Orange Paper Mill Co. As superintendent, a practical paper-maker named E. E. Emigh was secured from Pennsylvania. It was almost immediately demonstrated that a very excellent quality of paper could be made by the soda process from the yellow-pine sawdust, so called, but in reality the fine chips or shavings that come from the planers. But various problems had to be worked out, for making paper from yellow-pine shavings is quite different from paper-making in the North, where 90 per cent. of the mills use the sulphite process and in none of which yellow pine is used.

In 1904 the name of the company was changed to the Yellow Pine Paper Mill Co., and the capital stock was increased to \$200,000, where it has remained to the present time. New machinery and equipment were added from time to time, and improvements in methods and processes adopted, until finally the problem was fully solved and a point reached where conditions warranted a material expansion. Accordingly in January of this year, at the annual meeting of the directors, it was resolved to increase the capacity by adding twofold to the size of the present plant, and preparations were made that look to having the new machinery all installed by July 1 of this year. The additional machinery includes four more digesters, the trebling of the chemical plant, a 700-horse-power engine and other smaller engines, 1000-horse-power boilers, additional evaporators and rotary furnaces, as well as further conveying elevator machinery, etc.

As a by-product a small amount of turpentine is secured by condensing the vapors from the cooking process and redistilling. Some 50 gallons a day, that cost nothing, are thus secured, and in this quantity are easily marketed. On a large scale the results have never been equally satisfactory. There exists such a prejudice against turpentine waste products that a vast amount of the money invested in such enterprises has been irretrievably lost. It is deemed impossible that the splendid tests and theoretical successes attendant at distilling turpentine from waste pine will always go for naught, but thus far it is the fact that such experiments have been prolific breeders of losses.

The present officers of the Yellow Pine Paper Mill Co. are: W. H. Stark, president; J. W. Link, vice-president; F. H. Farwell, secretary-treasurer; E. W. Brown, L. Miller, directors. E. G. Goodall is manager and E. E. Emigh is still superintendent of the mill. ALBERT PHENIS.

The Chamber of Commerce of Baltimore has elected Messrs. Charles England, president; George F. Jackson, vice-president; Henry A. Wroth, secretary; J. B. Hession, assistant secretary and treasurer; Thomas C. Craft, Jr., Richard C. Wells, Douglas M. Wylie, A. S. Sidebotham and W. G. Scarlett, executive committee.

Uses of Graphite.

Jersey City, N. J., Jan. 30, 1909.

Editor Manufacturers' Record:

I note that Dr. Ihne, president of the Southern Graphite Co., takes exception to my statements published in the MANUFACTURERS' RECORD of January 21.

In other words, it is not because the graphite produced in the United States is less pure than that produced in Ceylon—it is simply a question of physical structure, the same as it is the difference in physical structure between the round and smooth sea-beach sand and the "sharp"

sired to try it, the same as they and we and other crucible makers have tried graphite produced in various parts of the world.

All crucible makers are obliged to make use of Ceylon graphite if they expect their customers to get the best results from their crucibles and other high heat-resisting articles. At the same time, crucible manufacturers the world over have been seeking other fields of supply than Ceylon, with the hope of finding something quite as good at less cost. The Morgan Company have also made large use of Travancore graphite obtained from the southern part of India. The Dixon Company has also made use of Travancore graphite.

Now let us look at the matter fairly. According to Government statistics, the Dixon Crucible Co. produces 60 per cent. of all the graphite mined in the United States. The Dixon Company mine this graphite at a less cost than the price they are obliged to pay for Ceylon graphite suitable for crucibles, and the Dixon Company has offered them nearly every day flake graphite of a high degree of purity produced in Canada, Pennsylvania, Alabama and other States at a much less price than Ceylon graphite.

Does any reader of the MANUFACTURERS' RECORD think the Dixon Company and the dozen other crucible manufacturers in the United States would willingly pay the high price demanded for Ceylon graphite if they could get American graphite at less money equally suitable for the Dixon crucibles?

Dr. Ihne says that he has sent a sample of amorphous graphite made from a deposit of graphite ore containing millions of tons of raw material in North Carolina, to a very old and well-known lead-pencil factory in Germany, and that firm was so well pleased that it was anxious to make a contract for large quantities of it at a handsome price. We are glad to know that there is such a fine deposit of pencil graphite in the United States. Will Dr. Ihne send us a sample?

There are a dozen crucible concerns in the United States all using high-priced Ceylon graphite. If Dr. Ihne can deliver the goods he will find a ready market here in the United States.

There are four lead-pencil manufacturers in the United States all using imported

graphite because they have been unable to find any graphite produced in the United States equal to the imported. Will Dr. Ihne please come forward with his samples? The crucible-makers and the pencil-makers will welcome him gladly. Why send samples abroad when there is such a good home demand and manufacturers anxious to make use of the material if it is equal to the foreign.

There is another matter of which it may be well to mention. All the clay which is used as a binder in the manufacture of crucibles and lead pencils is imported, and is used for the sole reason that no suitable clay has been found in the United States. If Dr. Ihne knows of any in the United States the crucible-makers and the lead-pencil-makers will be very glad to know of it.

There is one more thing of interest. Miners of graphite in Pennsylvania and in the South have written letters to the Committee on Ways and Means asking that a duty be laid on Ceylon graphite. Such an act would in no way help the graphite industry in the United States and would seriously injure both the pencil and the crucible industry. Certain miners of clay also have asked for a similar duty on imported clay used in the manufacture of crucibles. Such action might be good politics, but it's mighty poor judgment in view of the facts.

GEORGE E. LONG,

Treasurer Joseph Dixon Crucible Co.

Oil Mill and Fertilizer Factory.

Details for the establishment of a large cottonseed-oil mill and fertilizer factory at Montgomery, Ala., are being completed by Charles Ellis of Brewton, Ala., who is promoting the enterprise. It is announced that local and Northern capitalists are interested in the undertaking, and that about \$200,000 will be expended for the erection and equipment of the plants. In connection with this industry it is intended later to erect an ice plant and probably to establish a stock farm. Mr. Ellis advises the MANUFACTURERS' RECORD that the cottonseed-oil mill will have a daily capacity of 80 tons, and the fertilizer factory an annual capacity of 15,000 tons.

The Business Men's Association of Portsmouth, Va., has elected Messrs. Jas. W. Brown, president; Clark Moore, E. H. Hartsell, C. S. Sherwood, John L. Watson and R. S. Marshall, vice-presidents.



To be erected at Pensacola, Fla., for Pensacola Hotel Co.; reinforced concrete structure; seven stories; 96x150, with two-story addition 50x54 feet; contract awarded at \$261,000; contractor, C. H. Turner Construction Co., Pensacola; architect, William Lee Stoddart, New York.

I did not attempt to criticise his article, "Graphite in the South," in its entirety, although possible there were several openings through which criticism might be passed.

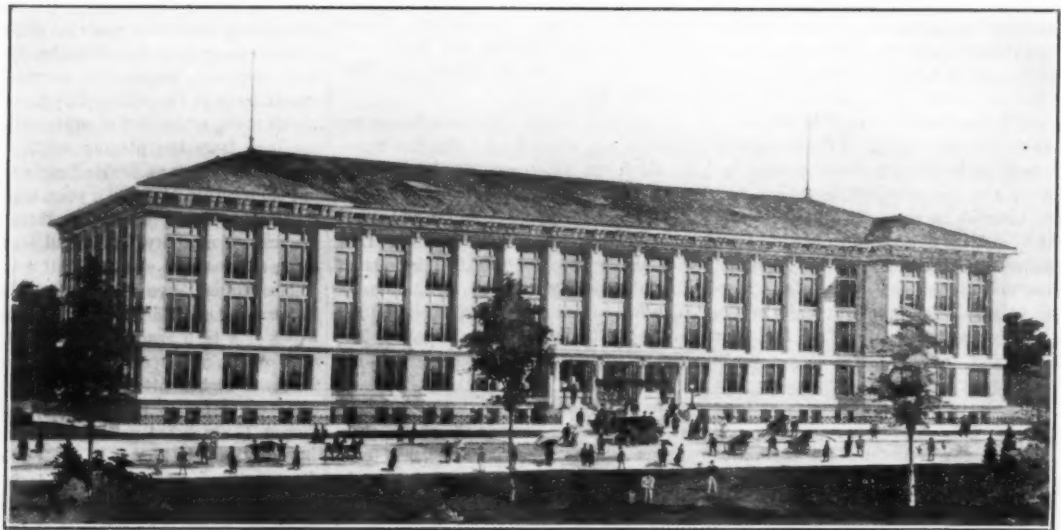
As Dr. Ihne had mentioned the different forms of graphite and its production in various parts of the world, his statement that the greatest demand was for "flake" graphite and that it commanded the highest price in the market, and that "flake" graphite is used for making crucibles and other heat-resisting articles, could not very well be taken by the general reader to mean as Dr. Ihne now says it meant, "graphite occurring in the Southern States of the great American Union."

However, we will let it go at that and will reply that, barring out the high-priced Ceylon graphite, the graphite produced in the Southern States of the great American Union does not command the highest price in the market, and every dealer in graphite knows it, if the general public does not. Neither is the graphite produced in the Southern States used to any appreciable extent in the manufacture of crucibles or other high heat-resisting articles, as any one of the dozen crucible manufacturers in the United States will affirm.

Dr. Ihne and all the rest of us in the business of mining or manufacturing graphite are at all times up against "a condition and not a theory." When the mason successfully uses the sand from the sea beach for his mortar, then the manufacturer of graphite crucibles will make use of the graphite produced in the United States for his crucibles.

building sand of the interior that prevents the use of sea-beach sand in the making of mortar.

Dr. Ihne says he had the pleasure of sending Alabama flakes to the Morgan Crucible Co. of Battersea, London. It may be that the Morgan Crucible Co. de-



BUREAU OF ENGRAVING AND PRINTING, PEKING, CHINA.

This is an illustration of American enterprise abroad. It shows the main building of the Bureau of Printing and Engraving to be erected at Peking, China. Milburn, Heister & Co., Washington, D. C., are the architects. This is the main building of a group, and it will cost \$300,000. The exterior walls will be of pressed brick, with tile roof, and the interior will be of reinforced concrete. It will contain all the latest devices used in an establishment of this kind. In addition to this building, the architects will provide heating plants, electric-power plant, water system, plumbing, ink and color mill, guard-house and six houses for the officers. All these buildings will be of fireproof construction.

WICHITA FALLS.**Rapid Increase of Population and Industrial Opportunities.**

[Special Cor. Manufacturers' Record.]

Wichita Falls, Texas, January 22.

Located 114 miles northwest of Fort Worth, Wichita Falls is the county-seat of Wichita county. The Big Wichita and Red River valleys, which traverse Wichita county, furnish an annual harvest of cotton, corn, wheat, oats, barley, forage crops, vegetables, berries, fruits and general farm products.

Civic improvements are the pride of its citizens. There are over 25 miles of cement sidewalks laid and 10 miles more authorized. Twelve miles of sewers, capable of supplying the needs of a population of 75,000, are near completion. A year ago the population was 5500; today it is 7565. The assessed value of city property in 1908 was \$2,956,280. The city tax rate is 65 cents; county and State, 48 11-12 cents, and school, 50 cents. The total bonded indebtedness of the city is \$94,000. The increase in valuation of 1908 over 1907 is \$1,093,220.

Six railroads enter Wichita Falls. There are 28 passenger trains in and out of the city daily. Division points are maintained here by the railroads, the monthly payroll exceeding \$30,000. Cheap fuel for manufacturing industries is had by reason of nearness to coal fields, embracing an area of 53 square miles, while the oil and gas fields cover a territory of 16 square miles. Natural gas from the Petrolia oil and gas fields have already been piped into the city. The oil and coal fields are tapped by railroads centering at Wichita Falls. Manufacturing plants have increased very largely on this account, while inquiries, as stated by Secretary Gohlke of the Chamber of Commerce, are coming in every day as to Wichita Falls as a place for industrial plants. The city has a flour mill, broom factory with a capacity of 200 dozen brooms daily, a brick and tile plant with an annual capacity of 25,000,000 bricks, a complete foundry and machine shop, a cottonseed-oil mill with a capacity of 80 tons daily. Besides these large industrial plants, other smaller industries are to be found, such as ice plants, concrete building-stone works, creamery, candy factory, bottling works, marble and granite works, sheet-metal works, planing mills, sash and door works, railroad repair works, two cotton gins and a cotton compress.

The banking facilities are commensurate with the needs and growth of the city. One State and two national banks have an aggregate capital of \$225,000, surplus and undivided profits of \$240,000 and deposits of \$1,650,000.

An attractive opera-house costing \$45,000, built entirely by local capital, has just been opened to the public. A Methodist Church with a Young Men's Christian Association has been finished at a cost of \$30,000. The City Hall, costing \$17,000, will be completed within a week. A new hotel five stories high, costing \$75,000, will be completed by the first of May. A large five-story office building, costing \$65,000, has just been opened and is occupied. Mr. F. H. Gohlke, the secretary of the Chamber of Commerce, says:

"One of Wichita Falls' great attractions is Lake Wichita, seven miles long by four miles wide, covering 3000 acres. It is situated but five miles south of the city, serving the water supply for Wichita Falls and a system of irrigation ditches to develop intensified farming. The Wichita Falls & Southern Railway skirts the edge of the lake. J. A. Kemp and Frank Kell and associates own the lake, and these gentlemen are behind the project of an

interurban line to develop a summer resort out there."

If this project of an interurban railroad can be financed it will mean the development of a stretch of land extending five miles south of the city, affording an opportunity of small farms, residences and manufacturing sites, besides furnishing the people with a delightful resort for the summer.

Mr. R. E. Huff, president of the First National Bank, is the president of the Chamber of Commerce. Owing to the intelligent work of this trade organization, not a vacant house can be found in the city, and newcomers are arriving daily. The hotels and rooming houses are taxed to their full capacity until it is getting to be a problem of accommodating the influx of new people. More new business blocks and residences are being erected than at any time in the history of the city. A franchise for an electric line has been applied for, which will mean further development. The directors of the Chamber of Commerce at a recent meeting took steps to pave the streets in the business districts and to light the city with natural gas. A union depot, extension of sidewalks, new high school, Interstate Fair, and the sending of a stereopticon exhibit into the Central States for the purpose of running a special excursion to Wichita Falls were matters authorized to be pushed to completion. ALEXANDER HELPER.

TIMBER LANDS INSPECTED.**Capitalists and Others from Canada Visit Louisiana.**

[Special Cor. Manufacturers' Record.]

New Orleans, La., January 30.

An important connection for Southern securities with capital of Canada and Europe is the vastly beneficial result expected from a visit just made this city and section by a party of Canadians who came here at the instance of the Dominion Securities Corporation of Toronto, and who are returning greatly impressed with the resources of the South. Primarily, the object of the visit was to inspect some of the properties of the Long-Bell Lumber Co., whose bonds had been offered the Dominion Securities Co. by Clarke T. Poole & Co. of Chicago. Some time before the depression of 1907 an issue of \$9,000,000 of bonds was made by the Long-Bell Company, but only something over half the issue had been placed. Poole & Co. made an offer to the Canadian Company to take up the balance, and the visitors who have just been here were induced to make a tour of inspection and report on the properties. A portion of the party started from Ottawa on the 16th, and all met at Chicago on the 18th, and a week was spent in the investigations. The personnel of the party was:

Robert Gill, manager of the Bank of Commerce; Henry K. Egan, managing director of the Hawksbury Lumber Co.; F. W. Avery, Hull Lumber Co.; F. W. Powell, Rideau Lumber Co.; Robert A. Hurdman, lumberman, and John C. Browne, Fraser & Co., lumbermen, all of Ottawa, Canada; W. A. Charlton, lumberman and dealer in timber lands, and N. L. C. Mather, Dominion Securities Corporation of Toronto, Canada; J. A. McLaughlin of Clarke L. Poole & Co. of Detroit, Mich.; Charles L. Crawford, Boston, Mass., timber cruiser, who had been all over the Long-Bell timber holdings, having spent six months on the work; C. B. Sweet, vice-president, F. J. Bannister, secretary-treasurer, and J. F. Burnham, Jr., all of the Long-Bell Lumber Co., Kansas City, Mo.; B. H. Smith, general manager of the Longville Lumber Co., Longville, La., and W. F. Ryder, assistant to vice-president of the Long-Bell Lumber Co., Bonami, La. The party made the trip in the Lou-

isiana & Pacific Railroad Co.'s private car Kymokan and the Pullman car Rover. After a visit to Kansas City, where the visitors were shown the \$1,400,000 office building of the Long-Bell Company, in which are the company's headquarters, the party made an inspection of the six sawmills of the company included in the property covered by the bond issue, and which are located at Alexandria, Woodworth, Yellow Pine, De Ridder and Lake Charles, and they also went into the timber in two places.

In stating the impressions gained from the trip Mr. Charlton, the spokesman of the Canadian visitors, unhesitatingly expressed his approval of conditions found.

"I never saw or heard of a lumber company so ably and systematically managed," he declared. "The physical properties are models of their kind, and each plant is under the management of a man capable of being president of the United States. The properties are very valuable, and the business is most ably conducted throughout, and I should say the security for the bonds offered is easily worth four for one."

All the party were much impressed with the wealth of timber resources in that portion of the South they visited, but Mr. Charlton regretted that the South was not paying more attention to reforestation. "With you it would be manifestly most easy to perpetuate your forests," said he, "for wherever we went we saw the young trees springing up in places which the fires had been kept out of. It seems to me this is a matter of so great importance that your people ought to take it up with earnestness and effectiveness."

It was evident that the party would make a most favorable report on the value of the securities in question. Poole & Co. have been making a special effort to get Canadian and European capital interested in Southern timber securities, and their apparent success in the present instance induces the hope here that this may be the beginning of a movement of such money in considerable volume.

ALBERT PHENIX.

Paving at Chattanooga.

[Special Cor. Manufacturers' Record.]

Chattanooga, Tenn., January 30.

The city of Chattanooga still has enough money on hand remaining from the sale of bonds to lay several hundred thousand dollars' worth of permanent street pavements; that is, with the amount contributed by the property-holders on each side of every street paved or resurfaced under the abutting property law. A number of contracts were awarded some time ago, work on which has never been commenced on account of the weather. Another cause for delay has been the fact that the Chattanooga Railways Co. has had a succession of applications for amendments to their franchise pending for several years, and the paving and resurfacing of several streets in the center of the city have been held up, waiting on the street car company to see what changes would be permitted in the routing of the cars. The City Council recently killed the last ordinance requesting an amended franchise, and the contractors have started energetically to work to do the street work thus delayed. Work on all of the paving for which contracts have been awarded will soon be in full operation.

The Board of Public Works has advertised for proposals to be opened on February 2 for about seven-tenths of a mile of vitrified brick paving on East Main street. This paving was advertised first in October last, but the proposals were not opened because the Chattanooga Station Co. and Central of Georgia Railroad had asked for the passage of an ordinance to allow the laying of a number of additional

tracks across Main street at grade on account of the new central passenger station. The City Council refused to pass the ordinance and proposed to allow the railroads to build all of the tracks they desired if they raised them on a viaduct. The railroads withdrew the request for the ordinance, and the city will now proceed with the brick street paving.

T. A. CALLUM.

In and Near Durham.

[Special Cor. Manufacturers' Record.]

Durham, N. C., February 1.

Gilbert C. White, former City Engineer of Durham, went to Graham, Alamance county, this morning to begin the building of 50 miles of macadam roads in that county. In the fall Alamance voted \$200,000 bonds. The contract will cover two years.

In Orange county, adjoining, there is a road-building movement. A \$25,000 bond issue has started the roads in Orange, and Hillsboro is being paved with modern material.

Durham county is finishing this week over Little River a reinforced concrete bridge. It spans a stream 200 feet and is the work of the Carolina Engineering Co. of Burlington. It is on the Durham and Roxboro road, a 17-mile turnpike, which experts are patterning after.

Durham has put her fire companies upon a paid basis. It is estimated that the saving in insurance rates will greatly reduce the additional cost, to say nothing of the aid to the property of the city. There are \$15,900,000 in taxable values here.

At a meeting of the County Commissioners today a joint committee from the Board of Aldermen and County Commissioners will take first steps toward the erection of a municipal building and county courthouse to cost \$75,000.

W. T. BAST.

BALTIMORE—JACKSONVILLE**Direct Line of Steamers To Be Established.**

President Joseph C. Whitney of the Merchants & Miners' Transportation Co. of Baltimore has announced that the directors have authorized the establishment of steamship service to Jacksonville, Fla., and that the Savannah line will extend the run of its steamers to that port, where the company bought 20 acres of land four years ago, giving it a water front of 800 feet south of Bay street, besides a tract of land north of that thoroughfare. The run from Baltimore to Jacksonville will be 72 hours, including the stop at Savannah.

This new line may necessitate the building of several new steamships for the Merchants & Miners' Company. It will at least demand more vessels than are now running between Baltimore and Savannah. Several hundred thousand dollars will be spent to improve the terminals at Jacksonville, where President Whitney will go to arrange for the immediate construction of a pier and freight sheds.

The new line is expected to carry large amounts of general freight from Baltimore to Jacksonville, while on the return trips it will carry naval stores, lumber and cotton, besides other products.

Library Plans Wanted.

Andrew Carnegie has donated \$15,000 for the erection of a library at Stamford, Texas, and plans are wanted for the building. For information address Homer D. Wade at Stamford.

Wants Plans for School.

Dan T. Price, Mayor, Yoakum, Texas, invites competitive plans for a school building; \$32,000 is available. The City Council will consider the plans on February 15.

RAILROADS

[A complete record of all new railroad building in the South will be found in the Construction Department.]

STREET RAILWAY DEAL.

A System of Electric Cars May Follow a Transaction at Greensboro, N. C.

It is announced at Greensboro, N. C., that the Greensboro Electric Co. has been sold to a syndicate organized by W. N. Coler & Co., bankers, 43 Cedar street, New York, who were represented in the deal by Bird S. Coler and Leonard H. Hole. It is furthermore stated that the new owners will improve the street railway, electric light and gas facilities of the company to the highest efficiency, and material has been ordered, including six new cars. It is furthermore stated that a new corporation, to be called the North Carolina Public Service Co., will be formed with \$3,500,000 capital, which may be increased to \$5,000,000, and the legal transfer of the property will be made within the next two months, or as soon as the legal formalities can be completed. Z. V. Taylor, managing director of the Greensboro Electric Co., is quoted as announcing the deal. The gas mains are to be extended to all parts of the city. Contract is made with the Southern Power Co. to furnish electricity by September 1 next, under a 10-year agreement. A new gas plant is to be established at the present power-house at a cost of about \$100,000. Some extensions of the street railway is contemplated, but work on interurban lines will not begin until the local work is finished.

It is further reported from High Point, N. C., that Coler & Co. have bought from E. B. Steele his interest in the North Carolina Electric Co., which, as heretofore reported, has done some work toward building an electric railway between High Point, Thomasville, Winston-Salem and Greensboro, and which owns rights of way and franchises. This plan is now expected to be carried out in connection with the Greensboro enterprise.

A letter from a representative of the MANUFACTURERS' RECORD says that Bird S. Coler was accompanied in his investigations of the Greensboro property by Joseph Hoag, Wallis Shepperd and C. B. Hall of New York; Frank Andrews and C. D. Andrews of Roxbury, N. Y.; C. E. Nicholls of Jefferson, N. Y., and J. P. Clark of Jackson, Mich.

The Greensboro Electric Co. has 8½ miles of standard-gauge track, with 13 cars, and operates the street railway, gas and electric-light and the city pumping plants of Greensboro. The directors include John Karr of Hackettstown, N. J., president; F. A. C. Perrine, 60 Wall street, New York, vice-president; Z. V. Taylor, Greensboro, N. C., secretary; M. D. Barr of 29 Broadway, New York, and Pittsfield, Mass., treasurer; E. P. Wharton of Greensboro, N. C.; W. O. Morgan of New York, John A. Chesney and G. A. Kenyon of Pittsfield, Mass., and F. R. Williamson of Flemington, N. J. Ernest Gonzenbach of Greensboro is general manager.

EFFECTS OF C. & O. DEAL.

Closer Traffic Relations Anticipated, Both East and West.

Concerning the Chesapeake & Ohio deal, a report from Richmond quotes Mr. Frederick W. Scott of Scott & Stringfellow, bankers, as saying that the syndicate which purchased 236,000 shares of stock from Kuhn, Loeb & Co. was composed of Edwin Hawley, Robert Fleming, Frank Trumbull and himself, and that this purchase, with the shares previously held by those interested, gives them control of the railway. Furthermore, he is reported as saying that Mr. Trumbull will become chairman of the

board, that George W. Stevens will continue as president, Decatur Axtell as vice-president and C. E. Doyle as general manager. The headquarters will remain in Richmond and the property will be largely developed and more vigorously operated than ever before. Reports that it would be transferred to some other system were denied, and it was asserted that it would be operated independently.

John P. Branch of Richmond, a banker and stockholder, is reported as saying that he looks to see the Chesapeake and Ohio with a terminus at both coasts. Presumably this is expected through connection with other roads in which Edwin Hawley is interested. It is also suggested that a new steamship line out of Newport News may be established in consequence of increased freight over the Chesapeake & Ohio to come from its independent operation.

Mr. Hawley is quoted in a report from New York as denying that the Chesapeake & Ohio had been purchased to be turned over to other railroad interests, but he said it was bought to be operated to its fullest capacity.

One result of the transaction may be to make closer the traffic relations of the Chesapeake & Ohio and the Atlantic Coast Line. Mr. Scott is a director in the Atlantic Coast Line and will doubtless become a member of the Chesapeake & Ohio board. This may tend to increase the importance of the Chesapeake & Ohio as a connecting link between the Atlantic Coast Line and the Louisville & Nashville Railroad, the latter being controlled by the Coast Line. Since the deal there has been some gossip in New York to the effect that the Cincinnati, Hamilton & Dayton Railway, now in a receivership, may be bought by the Hawley interests and used as a connection between the Chesapeake & Ohio and the Toledo, St. Louis & Western Railroad and the Chicago & Alton, which Mr. Hawley controls. It may be remarked, however, that the Louisville & Nashville would afford a friendly connection with the Alton at St. Louis. Connection with these roads would also mean through them connection with the other Hawley lines, namely, the Iowa Central and the Minneapolis & St. Louis.

OKLAHOMA—NEW MEXICO.

Construction Contract Closed to Complete the Altus, Roswell & El Paso Line.

With reference to a press report saying that the Altus, Roswell & El Paso Railway Co. had arranged with the St. Louis Trust Co. for financing, and that work was to be started at several additional points, President Edward Kennedy writes from Altus, Okla., to the MANUFACTURERS' RECORD as follows:

"The contract was made with St. Louis parties, who contracted to build the entire line of 286 miles, equip the same and assume all outstanding contracts. In regard to the trust company I do not know, only they put up a bond that they would fulfill contracts. The distance from Altus to Roswell is 286 miles. The first 33 miles west from Altus has been let to a contractor named Key; Tucker & Palmer have the 40 miles west from Lubbock, Texas, and West & Co. have the work east of Roswell. There is about 100 miles graded and ready for the steel. Everything is going on nicely. I have raised in bonuses to the amount of about \$1,000,000, half of which is available and the balance when line is completed. Have several bonding companies bidding for the bonds, which will be underwritten shortly.

"The road runs through one of the finest developed countries in the United States—65 miles from the Texas & Pacific and 60 miles from the Santa Fe—going through one of the best farming counties

there are West, and which is known as the South Plains. It traverses the first county out of Oklahoma, which is Jackson, then straight west to Greer county, and then through Childress, Texas, crossing the Fort Worth & Denver City Railway at that point; thence on a tangent line west for 145 miles through the counties of Hale, Matador, Lubbock and Cochran; then striking the territory of New Mexico and extending 86 miles to Roswell, a thriving city located in the Pecos Valley, where there is an abundance of fruit growing in orchards for miles and miles around. The city has a population of about 15,000, and is equipped right up to date. Roswell will be the terminus for the present, but later on the road will be extended into the coal fields 90 miles northwest from Roswell.

"I counted just 35 automobiles in one day carrying homeseekers and prospectors going south out of Plainview down on our line to purchase land and farms. They are coming from all over the United States making investments. The South Plains are very productive for wheat, corn, oats, etc., and there are good established homes all along the line and trees growing prosperously."

ASHERTON & GULF.

A Texas Line in a Rich Country—May Build Important Extensions.

President Asher Richardson writes from San Antonio, Texas, to the MANUFACTURERS' RECORD as follows:

"I am building the Nueces Valley, Rio Grande & Mexico Railroad from Artesia, a point on the International & Great Northern Railroad, to Asherton, the center of Dimmit county. The road runs in a rich artemesian belt—a great fruit and track-growing country.

"I am financing the line myself, and so far have not bonded it. The directors are W. W. Williams, J. M. Crump, W. W. McKinley, W. A. H. Miller, A. W. McElwee, A. M. Wells, Judge John T. Bevins, vice-president; Z. T. Nesbit, John C. Dennis, and Asher Richardson, president and general manager.

"We have agreed to amend our charter to the extent of changing the headquarters to Asherton, instead of Carrizo Springs, and calling the road the Asherton & Gulf Railroad instead of the Nueces Valley, Rio Grande & Mexico.

"After building to Asherton we will probably extend toward the Gulf down the Nueces Valley, which is one of the richest valleys in Texas. Asherton will be the present terminus on that end."

Another report just published, and credited to an official, says that the company was organized to build from Eagle Pass, Texas, to Aransas Pass, Texas, about 300 miles, and that contract is let to the J. F. Burns Construction Co. of Devine, Texas, for the section from Artesia to Asherton, 32 miles, the latter point to be the western terminus for some time. Ten miles of grading have been done, and tracklaying is to begin immediately with 65-pound rails. In the near future it is expected to start work from Artesia eastward to Aransas Pass and westward from Asherton to Eagle Pass. R. H. Gresham of San Antonio, Texas, is chief engineer.

L. & N. SELLS BONDS.

Will Release \$6,000,000, Which May Be Used for Improvement Work.

The Louisville & Nashville Railroad, according to a report from New York, has sold to J. P. Morgan & Co. nearly \$30,000,000 of bonds, and after the liquidation of \$23,000,000 of 4 per cent. 5-20 collateral trust bonds, to be redeemed on April 1, the company will have, it is stated, about \$6,000,000 left for improvements. It is said that the exact amount of bonds

sold is \$29,864,000, of which \$18,200,000 are Louisville & Nashville unified 4s of 1890, which mature in 1940; \$4,619,000 of Paducah & Memphis division bonds; \$2,500,000 of Louisville & Nashville Terminal Co. 4s; \$4,045,000 of South & North Alabama 5s, and \$500,000 of Pensacola & Atlantic 6s. The bonds sold were the collateral securing the \$23,000,000 bonds which are to be redeemed. This latter issue, which was authorized in 1903, amounted to \$30,000,000, and only \$23,000,000 are outstanding. According to a report from New York, the bonds sold brought at least par.

STEAMSHIPS AND RAILWAY.

New Route Contemplated From Jacksonville to Chattanooga or Memphis.

Concerning a press report that Mr. Geo. F. Montgomery of Jacksonville, Fla., was interested in a plan to build a railroad from that city to Chattanooga, Tenn., the MANUFACTURERS' RECORD is informed that a syndicate of European capitalists is now completing details for establishing a steamship line from Jacksonville to Mediterranean ports, and the organization of a line will soon be completed.

The same parties intend to investigate with a view to constructing a railroad by the best and most practicable route from Jacksonville to either Chattanooga or Memphis, Tenn. It is understood, however, that the matter is at present in only an indefinite form.

Southern Pacific Report.

The Southern Pacific Company has issued its twenty-fourth annual report, which covers the year ended June 30, 1908. It shows that the mileage operated is 9505 miles, an increase of 105 miles during the year. The gross operating revenues were \$113,545,566; decrease, as compared with 1907, \$2,084,604; total revenues, \$123,276,920; decrease, \$2,917,439; operating expenses, \$76,005,494; increase, \$4,870,232; total expenses, including taxes, \$88,613,191; increase, \$5,451,358; revenues over expenses and taxes, \$34,663,728; decrease, \$8,368,798; total income, \$38,673,209; decrease, \$8,644,901; surplus over fixed charges, \$21,403,595; decrease, \$8,193,955. After the payment of other charges there was left a surplus of \$19,893,472; decrease, \$7,805,120. Out of this there were paid dividends on the preferred and common stock amounting, respectively, to \$5,240,652 and \$11,872,047. After the appropriation of comparatively small sums for surveys and water-power examinations, amounting altogether to a trifle more than \$19,000, there was left a net surplus of \$2,761,745.

The expenditures for additions and betterments during the year amounted to something more than \$6,500,000. This included for lines in Louisiana \$927,157 and for lines in Texas \$329,486. There was completed at the date of the report—January 12, 1909—on the extension from Lafayette, La., to Port Allen, opposite Baton Rouge, about 29 miles of track, and, in addition to this, about 12 miles of grading were completed. On the extension from Bayou Sale to South Bend, La., 11 miles, about seven miles were completed, but the grading is finished for the rest of the line.

Kansas City Southeastern.

President Charles A. S. Sims of the Kansas City Southeastern Traction Co., Kansas City, Mo., writes the MANUFACTURERS' RECORD that engineers are in the field cross-sectioning the line in preparation for contractors to bid April 1. The work will be rock excavation. Continuing, he says: "We will use the under-running third rail within the enclosed and protected right of way, and the overhead feed wire, catenary constructed, through cities

and towns. While the question of current has not as yet been fully decided upon, the probabilities are that we will adopt the single A. C. phase."

Mr. Sims also forwards the following description of the route: "The road is to begin at Kansas City, Mo., and keep closely a southeasterly direction for the first 30 miles to Lone Jack; thence in a more easterly direction, via Warrensburg and Sedalia, to Jefferson City, 125 miles. The line passes through the following small cities and villages after leaving Kansas City, viz.: Leeds, Raytown, Little Blue, Lee's Summit, Cockrell, Lone Jack, Pitts-ville, Warrensburg and Sedalia to Jefferson City. * * * The company has the right to carry freight, mail and express."

"There will be a branch some 15 miles long to the south from Lee's Summit to Greenwood, Pleasant Hill and Harrisonville; another branch (as yet prospective) leaving the trunk line at Pitts-ville, about eight miles north of Holden, Johnson county, that will go through Holden and thence south about 24 miles to Clinton."

The section between Kansas City and Lone Jack, 30 miles, is to be constructed first. C. G. Minturn is secretary of the company and Benjamin F. Shouse treasurer. J. C. Herring is chief engineer.

Fort Worth to Cleburne.

Regarding the proposed interurban railway between Fort Worth and Cleburne, Texas, Mr. B. G. Leake, chief engineer, Fort Worth, Texas, writes the MANUFACTURERS' RECORD that the preliminary surveys have been made. He also says:

"Our road will be built between Fort Worth, Everman, Burleson, Joshua and Cleburne. We will make our permanent location surveys at once, partly being organized. The official name of the company will be the Southern Traction Co. F. H. Petera will be president. The headquarters are at present Room 28 Dundee Building, Fort Worth, Texas. The trustees are S. B. Hovey, H. H. Cobb and T. Yarbrough, all of Fort Worth."

"We will have connections with the International & Great Northern Railway at Fort Worth and Everman, with the Houston & Texas Central Railway between Fort Worth and Everman, with the Missouri, Kansas & Texas Railway at Burleson, and with the Gulf, Colorado & Santa Fe at Cleburne."

"The country is an excellent truck gardening region, thickly settled and suitable for fine future development."

"We figure on using high-speed gasoline motor cars."

"We are not yet enough advanced to give any definite information as to when bids will be received for construction and equipment."

New Equipment.

Chesapeake & Ohio Railway has ordered from the Standard Pressed Steel Car Co. of Pittsburg 500 steel hopper-bottom gondola cars of 50 tons capacity. The company has also ordered from the Richmond branch of the American Locomotive Co. 15 consolidation locomotives, with the option of ordering 15 more within 30 days.

The Seaboard Air Line has notified the Richmond branch of the American Locomotive Co. to deliver immediately 15 of the 20 locomotives ordered before the receivership of the railway.

The Pennsylvania lines west of Pittsburg have ordered, it is reported, 2200 freight cars to replace equipment as follows: Cambria Steel Co., 1000; Pressed Steel Car Co., 500; American Car & Foundry Co., 600; Standard Steel Car Co., 100.

The New Orleans Great Northern Railroad Co. is reported to have filed an equipment mortgage in Mississippi covering 765

freight cars, costing over \$616,000, and including 200 flat-bottom gondola cars, 200 flat cars, 300 box cars and 65 stock cars. The Western Steel Car & Foundry Co. gets at least part of the contract.

The Western Maryland Railroad has ordered from the Standard Steel Car Co. 300 box cars and 600 gondola cars, the latter being arranged for conversion into coke cars if desired. The contract is subject to the court's approval.

Extension in Washington.

The Washington, Baltimore & Annapolis Electric Railway Co. has applied to Congress for authority to run its cars from 15th and H streets N. E., in Washington, D. C., across the city as far as the Treasury Building. Bills have been introduced in both the Senate and House to grant the company the right to build its own line from the District of Columbia boundary, on the Blandensburg road, to Florida avenue, to K street east and west, to 6th street west, with a single-track loop from New York avenue along 13th street to E street, to 11th street, and back to the main line at H street. At present the company uses the tracks of another corporation from the District boundary to 15th and H streets N. E., where Florida avenue meets those thoroughfares. It is provided that within the city limits the conduit trolley system shall be used, while the overhead trolley may be used as at present between 15th and H streets N. E. and the District line. This company operates the double-track electric railway between Baltimore and Washington, with a line to Annapolis. Its headquarters are in Baltimore, where the line runs to the heart of the city.

Puget Sound & Mexican Gulf.

Mr. J. M. Hamilton, Port Townsend, Wash., writes the MANUFACTURERS' RECORD that the proposed route of the Puget Sound & Mexican Gulf Railway, which he has planned, is from Tacoma, following the lowest pass to the crossing of the Columbia River; thence through Oregon, touching important towns, to Tuscaraora and Palisade, Nev., absorbing the Eureka & Palisade Railroad and converting it to standard gauge; from Eureka to Ely, Nev., and then to Newhouse, Milford and Marysville, Utah, to a crossing of the Colorado River at Hite, whence the route will be via Bluff and Farmington to Albuquerque, N. M., and eastward to Santa Rosa; southeast to Fort Sumner and Portales, N. M., and Big Springs and San Angelo, Texas; then to a port on the Gulf of Mexico to be hereafter selected. He wishes to secure in his plans the co-operation of men of means and of ability suitable to the fulfillment of the project.

Tennessee Northeastern.

A letter from the Tennessee Northeastern Railroad Co., Jamestown, Tenn., to the MANUFACTURERS' RECORD says that surveys are being made for the line, which is to run from a point near Winchester Siding, Tenn., on the Queen & Crescent Route, through Scott, Fentress and Cumberland counties to a point on the Nashville, Chattanooga & St. Louis Railway at or near Ravenscroft, Tenn., a distance of approximately 80 miles, to open up valuable coal and timber lands. It will be standard gauge. The directors are: President, D. L. Fickes of Scranton, Pa.; vice-president, J. N. Graves of Jermyn, Pa.; secretary, Ward R. Case of Jamestown, Tenn.; treasurer, Phil. Chesebrough of Scranton, and D. N. Potter of Dalton, Pa.

Paris Mountain Electric Road.

Mr. A. E. Sussex writes from Greenville, S. C., to the MANUFACTURERS' RECORD as follows:

"The Paris Mountain trolley road is at

present only an idea which many of us hope will materialize. Briefly, the condition of affairs is this: 'The Chicago Development Co.' has offered to construct and put in operation an electric road from a point in this city to the top of Paris Mountain, about eight miles, provided the people of Greenville will subscribe \$30,000, to be paid after the road is in operation. Many consider this a good opportunity to open one of the finest sites for a summer resort in the South, and are working to obtain this bonus. We have not begun a canvass as yet, so I cannot prophesy the result, but we hope to be successful. The line will run only from the city to the top of the mountain, and will be wholly a local enterprise."

Stamford & Northwestern.

Mr. D. B. Keeler, vice-president of the Wichita Valley Railway Co., Fort Worth, Texas, writes the MANUFACTURERS' RECORD that 75 miles of the Stamford & Northwestern Railway is under construction. This line runs from Stamford, Texas, in a northwesterly direction through Sagerton, Aspermont and Jayton. The ultimate destination, or the question of construction beyond the 75 miles, has not been settled. The Fidelity Construction Company of Fort Worth, Texas, has the contract for building this line, and the 75 miles have been let to P. M. Johnston of St. Elmo, Ill., for all work except track-laying. This road will connect at Stamford with the Wichita Valley lines and the Texas Central, and at Sagerton with the Kansas City, Mexico & Orient Railway. The line runs through a partially developed agricultural country.

Cars for Gainesville, Texas.

A letter to the MANUFACTURERS' RECORD from Gainesville, Texas, says that E. S. Alnutt will begin the construction of a street railway there on March 1. The line is to be standard gauge, and is to be equipped with six-cylinder motor cars. Mr. Alnutt was granted a franchise in the latter part of December, and has already made contracts for all the material that he will need.

Denver, Kingfisher & Gulf.

Mr. C. G. Jones, Oklahoma City, Okla., writes the MANUFACTURERS' RECORD confirming the report that he owns the charter and survey from Oklahoma City to the northwest for the Denver, Kingfisher & Gulf Railway. He will not commence any active work upon the road until about the middle of March. It is not settled that the line will be built this year.

The Choctawhatchee Power Proposition.

Several months ago the MANUFACTURERS' RECORD reported the incorporation of the Choctawhatchee River Light & Power Co. of Dothan, Ala., with a capital stock of \$1,000,000. During the week advices have been received that the company has sold a controlling interest to the Morris Lumber Co., and new officers have been elected as follows: President, A. C. Kelley; vice-president and general manager, G. S. Kelley; secretary and treasurer, A. L. Kelley. The company will at once begin the construction of its proposed water-power-electric plant to develop and transmit 4000 horse-power by electricity. Correspondence should be addressed to the president at Slacomb, Ala.

School Building Plans Wanted.

Architects are invited to submit plans for erecting a school building in Cullman county, Alabama. Plans will be considered on February 15. Address W. A. Heck, chairman of committee, Cullman, Ala.

MINING

Petroleum in 1908.

The production of petroleum in the United States in 1908, according to a preliminary estimate made by David T. Day of the United States Geological Survey, amounted to between 175,000,000 and 180,000,000 barrels, an increase between 5 and 9 per cent. as compared with the production of 166,000,000 barrels in 1907. The total value of the product showed an even greater proportionate gain, for the price of oil increased in California and remained steady in other fields except the Gulf. The increases are attributed to steady growth in Illinois and California, though neither field showed phenomenal development.

The greatest gain in number of barrels and in percentage of production was in Illinois. During the last half of 1907 the rate of oil production in this State was more than twice as great as in the first half, and this increase continued throughout 1908, so that the record for the year shows a gain of more than 8,000,000 barrels beyond the output of 1907, or fully 33 per cent.

In California the progress of the industry was marked by increased production, consumption, prices and shipments; decreased stocks and extension of fields. The value of the oil production in California in 1907 exceeded that of any other mineral product, and the State was second in rank among oil-producing States. From the best information available at the present time it is believed that the production of crude petroleum in California in 1908 will aggregate between 44,000,000 and 46,000,000 barrels, exceeding that of 1907 by about 12 per cent. Nearly every district shared in the increase.

Production is said to have declined generally in the Appalachian and Lima-Indiana fields, but the Mid-continent field held its own. In Colorado the production of the Florence and Boulder fields continued steadily during 1908, and much interest was aroused in the new Rangely field, in the northwestern part of the State.

Unprecedented floods in May and June and again in November wrought great disaster to pipe lines in Oklahoma. During the year also much damage was done by lightning, more than 100 tanks being struck and destroyed by fire, with a loss of more than 1,000,000 barrels of oil.

In Kansas and Oklahoma unusual activity was evident in the erection of small refining plants, many of them for the purpose of taking off light products from petroleum and selling the residuum for fuel oil or for use on roads.

The decline in production in Texas, begun in 1907, continued in 1908, in spite of new finds south of the developed fields.

In Louisiana the chief event of the year was the withdrawal from entry of 6500 acres of public land in the neighborhood of the Caddo field, pending a careful geologic examination by the United States Geological Survey, with a view to preventing a waste of natural gas that has been estimated at 75,000,000 cubic feet a day, or more than one-twentieth of the amount consumed in the entire United States. An investigation of the oil field in co-operation with the Geological Survey of Louisiana is now in progress, and additional information concerning it will be available this spring. Production in Southern Louisiana was steadily maintained.

The Maryland Steel Co., Sparrows Point, Md., through R. C. Hoffman & Co., sales agents, has been awarded a contract to furnish 7200 tons of steel rails for the Isthmian Canal Commission.

LUMBER

[A complete record of new mills and building operations in the South will be found in the Construction Department.]

The Sewell Lumber Co.

Another extensive timber development enterprise is announced for West Virginia in authoritative advices received by the MANUFACTURERS' RECORD. The enterprise will involve an investment of about \$250,000 for timber lands and plant. It is under the management of F. O. Havener of Parkersburg, W. Va. Mr. Havener and Pittsburg associates have taken over the Sewell Lumber Co. and purchased 7500 acres of virgin timber land estimated to contain from 75,000,000 to 90,000,000 feet of white oak, poplar, ash, cherry, walnut, chestnut and hemlock lumber in Fayette county. The company will install a band mill for a daily output of 50,000 feet of lumber, kilns for drying hardwood lumber green from the saw and of sufficient capacity to handle entire output, and a circular mill for sawing timbers up to 60 feet long. It will construct a narrow-gauge railway, using 35-pound steel rails, equipped with 30-ton locomotives and heavy logging cars. Long distance cable steam skidder system will be used to yard the logs. The mills will be located at Sewell, W. Va., and will be planned for an annual output of 15,000,000 feet of lumber. Mr. Havener is president and F. R. Babcock is vice-president of the Sewell Lumber Co., with main offices at Parkersburg, W. Va. E. V. Babcock & Co. of Pittsburg, Pa., are the company's sales agents.

Another Big Surry Mill.

The Surry Lumber Co., Francis E. Waters, president, main offices in the Union Trust Building, Baltimore, Md., will add to its facilities by building a large planing mill at Norfolk, Va. This mill will have from 15 to 20 machines and accompanying equipment for the daily production of 200,000 feet of lumber. It will have either an electric or steam power equipment, and the building will be of the most modern character, concrete being one of the forms of construction under consideration. The company has purchased a site of 36 acres, fronting 700 feet on the Elizabeth River and extending to the Belt Line Railway. It will build docks, construct switching railways and provide other facilities for the economical handling of lumber, and later may build a box shock factory. This new Norfolk plant will augment the Surry Lumber Co.'s facilities and enable it to meet the increasing demand for its products. The company is one of the most important Southern lumber manufacturers and has other large mills in Virginia, besides a new mill which recently began operations in North Carolina.

Southwestern Lumber Association.

The twenty-first annual convention of the Southwestern Lumber Association was held at Kansas City, Mo., last week. The meeting began with the annual address of President John Halloren of Ottawa, Kans., followed by the reports of Secretary Harry A. Gorsuch and Treasurer J. H. Foreman, both of Kansas City, Mo. Addresses were made by a number of speakers on different phases of the lumber industry and other subjects, and one on the "Growth of the Cement Industry," by A. B. Hashtomann of Allentown, Pa. The report of the committee on resolutions, embodying a suggestion that the association send two delegates to the convention of the National Tariff Commission at Indianapolis, February 16, 17 and 18, was adopted. The report also included resolutions favoring good roads, deep waterways, forest con-

servation and opposing the parcels post idea. The following officers were elected: W. D. Frantz, Enid, Okla., president; C. E. Matthews, Webb City, Mo., first vice-president; Andrew Aitken, St. Johns, Kans., second vice-president; J. H. Foreman, Kansas City, Mo., treasurer.

For a Pulp Mill.

The MANUFACTURERS' RECORD has received from Bernard Mason of Pearisburg, Va., the following statement: "The Nobusiness Lumber Co. has just completed the purchase of some 25,000,000 feet of timber in Bland county, Virginia, and has built an incline over Wolf Creek Mountain, connecting with the New River, Holston & Western Railway, which latter road connects with the Norfolk & Western at Narrows, Va. The timber will be developed at once. Mills are now at work. The timber is particularly good for staves. We would be glad to have the addresses of wagon-hub manufacturers. There is an immense amount of timber suitable for a pulp plant. If the above is of sufficient importance for mention in the MANUFACTURERS' RECORD you may use it; anyone desiring information can get same through me."

Acquires Coal Lands.

The MANUFACTURERS' RECORD is advised that the Red Ash Coal & Coke Co. of Staunton, Va., which has recently incorporated with a capital stock of \$50,000, has acquired 2270 acres of coal lands in Tazewell county, Virginia, which it expects to lease for development, not intending to operate mines itself. The property is located on the Clinch River division of the Norfolk & Western Railroad, near Doran Station, and is said to contain deposits of domestic, steam and coking coal. Officers of the Red Ash Coal & Coke Co. include J. S. Pancake, president; R. S. Turk, vice-president; C. R. Caldwell, secretary, and J. N. McFarland, treasurer.

Wants Birch Veneering.

The Hardwood Manufacturing Co., 620 East Washington street, Greensboro, N. C., wants saved birch veneering three-sixteenths inch and one-twentieth inch thick.

Wants Long-Leaf Yellow Pine.

F. F. Spencer, superintendent of the Southern Building & Improvement Co., 619 Century Building, Atlanta, Ga., wants prices on long-leaf yellow pine for mill construction.

In Market for Lumber.

The South Virginia Beach Corporation, 609 Paul-Gale-Greenwood Bldg., Norfolk, Va., will be in the market for 500,000 feet (all or part) of cheapest grade flooring, 200,000 feet (part or all) cheap sheathing and 200,000 feet of cheap weatherboarding.

Lumber Notes.

Lumber shipments through the port of Jacksonville for January amounted to 26,646,241 feet.

The National Box Manufacturers' Association will meet at Chattanooga on February 24, 25 and 26.

It is announced that the Union Pacific Railroad has placed an order with G. T. Butler of Knoxville for 50,000 crossties, the order to be filled by August 1.

The British steamer Caircrag cleared from Port Arthur, Texas, with a cargo of about 3,000,000 feet of lumber for Cape Town, South Africa, and Delagoa Bay on the East African Coast. The lumber was supplied by the Chicago Lumber & Coal Co., and the shipment made by Patterson & Co. of Mobile.

TEXTILES

The New Erwin Mill.

Last week the directors of the Erwin Cotton Mills Co. held a meeting at West Durham, N. C., and decided to build the new mill mentioned in the MANUFACTURERS' RECORD of January 21. This mill will be equipped with 50,000 spindles and accompanying looms (about 1500) for the production of gray goods, about half to be for converting and half to be wide sheetings. F. P. Sheldon & Sons, Providence, R. I., have been engaged as the engineers in charge and instructed to prepare plans for building. When these have been completed the company will invite bids for construction. It has not been determined whether to locate the new plant at West Durham or at Duke, N. C. The MANUFACTURERS' RECORD will be advised of further details when they have been decided by the management of the Erwin Cotton Mills Co. Probably over \$1,000,000 will be expended for the new plant.

The Erwin Cotton Mills Co. is a \$4,000,000 corporation which operates 25,000 spindles and 1000 looms, producing denims and camlets, at West Durham, and 35,000 spindles and 1000 looms, producing indigo blue denims, at Duke, W. A. Erwin is treasurer.

Big Addition at Easley, S. C.

The Easley Cotton Mill of Easley, S. C., is planning to build a big addition to its present plant of 37,744 spindles and 1020 looms. This addition will provide modern buildings for an equipment of 25,000 spindles and 600 looms for the manufacture of sheetings, which the company is now manufacturing. Electric power will be used. The additional plant will cost probably \$500,000, and Jos. E. Serrine, Greenville, S. C., is to be the engineer in charge. J. M. Geer, president of the company, telegraphs the MANUFACTURERS' RECORD that the addition has not been definitely determined, but it will probably be built.

Mill for Hendersonville, N. C.

Messrs. D. D. Little of Spartanburg, S. C.; Carroll Baldwin and S. J. Hallyburton of New York city have submitted a proposition for the organization of the cotton-mill company recently mentioned at Hendersonville, N. C. They offer to invest \$200,000 provided \$75,000 is subscribed in Hendersonville. The business men of Hendersonville have appointed a committee with W. A. Smith as chairman to endeavor to secure the necessary subscriptions.

The Proposed Summerville Mill.

Messrs. Z. T. McKinney of Greenville, S. C., and E. W. Studivant of Summerville, Ga., are reported as having secured subscriptions amounting to \$150,000 toward the organization of the proposed company recently mentioned. They plan the erection of brick or reinforced concrete structures and the installation of 10,000 spindles, 300 looms, etc., for manufacturing print cloth.

Manufactures Waterproof Cloth.

The Ferguson Waterproof Co. of Paducah, Ky., will not rebuild its plant recently burned. It has removed this enterprise to 2116 South 2d street, St. Louis, Mo., and there occupies a two-story brick building 100x150 feet. Machinery has been installed for the daily production of 10 dozen waterproof coats.

To Reorganize the Company.

George Stephens, president of the American Trust Co., Charlotte, N. C., representing the creditors of the Southern Cotton Mills of Bessemer City, N. C., has

purchased the mill property and will reorganize the company soon. The sale was effected at \$110,500. The plant has 15,216 spindles and 401 looms.

To Rebuild No. 4 Mill.

The Locke Cotton Mills Co. of Concord, N. C., will rebuild mill No. 4 (formerly Odell), but telegraphs the MANUFACTURERS' RECORD it is not prepared to state particulars now. Reports say 50,000 spindles will be installed.

A \$25,000 Plant.

The Skyland Hosiery Co. of Flat Rock, N. C., expects to build a dyeing and finishing plant with a daily capacity of 2000 dozen pairs of hosiery. The cost will be about \$25,000.

Textile Notes.

W. H. Murray of Hawkinsville, Ga., has completed his mill, and will begin to manufacture cotton towels.

The Wadesboro (N. C.) Cotton Mill is reported as to add 1000 spindles and accompanying machinery.

John B. Pinner of Suffolk, Va., is corresponding with silk manufacturers who contemplate building a mill in Suffolk.

The Highland Park Manufacturing Co. of Charlotte, N. C., has decided not to build the proposed coarse-yarn mill lately mentioned.

The Woodruff (S. C.) Cotton Mill is reported as to build an addition this year. It now operates 37,000 ring spindles and 810 broad looms, producing print cloths.

The Icemorlee Cotton Mills Co. of Monroe, N. C., is reported as contemplating the erection of another mill. It is now operating 5000 spindles on yarn production.

A. C. Kelley of Slocumb, Ala., has not completed arrangements to organize the proposed cotton-mill company previously reported. About \$40,000 has been subscribed.

It is reported that the Southern Cotton Mills of Hawkinsville, Ga., will add 5000 spindles. This is the new company which acquired the Hawkinsville Cotton Mills last month.

The Jonesville (S. C.) Manufacturing Co. is reported as to begin the reconstruction of its hosiery mill destroyed by fire last August. The plant had 250 knitting machines.

It is reported that the Wm. H. Ashley Silk Co. of Hackettstown, N. J., will build a branch silk-throwing mill at or near Norfolk, Va. This company has a Southern mill at Kinston, N. C.

The Upson Manufacturing Co. of Thomaston, Ga., will build a cotton-yarn mill at Forsyth, Ga. It will erect modern buildings and install machinery (probably 3500 ring spindles, etc.) for manufacturing cotton yarns.

Otto Goetze has leased the Ashland Manufacturing Co.'s mill at Dickeyville, Md., and will operate it. The lease runs five years from May 1, 1909. The plant has an equipment of 2784 spindles, 29 looms, etc., for manufacturing cotton duck.

A legislative committee has reported favorably on a bill appropriating \$150,000 for the establishment of a bagging, sack and twine mill in the State penitentiary at Rusk, Texas. Hon. Thos. M. Campbell, Governor, Austin, Texas, can probably give information.

Export shipments of lumber through the port of Pensacola during January amounted in value to \$1,803,053. Cargoes went to Belgium, Denmark, France, Germany, Italy, Netherlands, England, Scotland, Argentina, Brazil, Uruguay, French Africa,

MECHANICAL

The Lytton Return Trap.

A return trap is a device which receives the water of condensed steam from whatever source and automatically delivers it into the boiler at practically the temperature due to the pressure at which the

when there is water or oil to be removed, remain idle when there is none. One of the oldest designers and engineers in the United States, who has had a very wide and varied experience with oil separators, receivers, etc., upon being shown the drawings of this trap, said to the manufacturer: "I believe you have the most practical devices for the purpose I have

construction; No. 12, of medium construction, and No. 75, which is extra heavy. The AA is made in all sizes, 2½ to 12 inches, inclusive; the No. 12 in 2½ to 25 inches, inclusive, and the No. 75 in 4 to 12 inches, inclusive. These style wheels are all carried in stock in large quantities; also the tires to fit them. The George P. Clark Company also manufactures a general line of trucks and casters.

New Cameron Condenser.

A sectional view herewith represents a new design of Cameron surface condenser, mounted over combined air and circulating pumps.

This apparatus is especially recommended for locations where the water supply for condensation is salt or unfit for boiler feed, and where it is desired to save the condensed steam for that purpose. It will readily maintain a vacuum of 26 inches referred to a 30-inch barometer when supplied with sufficient cooling water.

The cylindrical condenser is mounted on top of a direct-acting combined air and circulating pump, the three cylinders of which are in a straight line, the steam cylinder in the center and the air and water cylinders at each end. By this arrangement a very smooth and steady running pump is ensured, as the regulating action of the water pump equalizes the irregular load on the air pump.

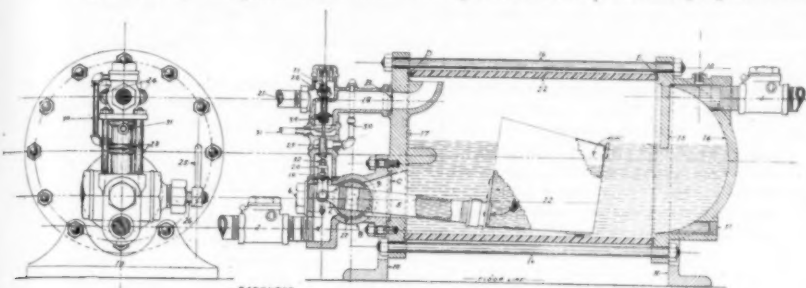
through the tubes, where it is condensed, and finds its way by gravity to the air pump as condensed water, air and non-condensable vapors.

The condenser shell, water chamber and covers are cast iron. The tubes are seamless drawn brass, and are secured at each end into Muntz metal tube plates by means of brass screw glands packed with corset lace packing. The tubes are free to expand and contract, but are held from getting out of place endwise by a shoulder in the screw glands. Where the tubes are long, they rest in a support plate placed midway in their length. In all cases they are relieved from any impact of incoming steam by a baffle-plate placed opposite the exhaust steam inlet. The condenser can be opened up and inspected without disconnecting any of the pipe connections.

The steam cylinder is of the well-known Cameron type, with no outside valve gear, and makes its full stroke every time. The steam cylinder heads are removable without disconnecting any of the other parts. Both pump cylinders are brass-lined, and are fitted with brass pistons arranged for fibrous packing. The piston rods are of Tobin bronze, and separate at the steam piston. The valve system in both air and water cylinders is of the usual Cameron arrangement. By removing the cover at each end of the cylinder every valve is exposed to view. Each valve stem holds two valves, with their springs one above the other, so that by simply unscrewing one plug and pulling out the stem both are released. The air and water cylinders are in the most accessible position for inspection and repairs, and the air piston and valves are submerged at all times.

The A. S. Cameron Steam Pump Works, foot of East 23d street, New York, are prepared to build all sizes of surface condensers up to 1500 horse-power, and can furnish condenser shells of sheet steel or copper where lightness is a factor, or pump ends of all brass if desired. Where there is not sufficient headroom, the condenser may be placed alongside the pump, but in all cases it should be high enough for the condensed water to flow by gravity to the air pump.

Consul-General of Ecuador, Felicísimo Lopez, 11 Broadway, New York, writes to the MANUFACTURERS' RECORD calling attention to the opportunities for manufac-



THE LYTTON RETURN TRAP.

steam is condensed. The existing conditions in a steam plant invariably determine the manner in which a trap may be most profitably employed, but there are so many general or "standard" conditions in the average plant that a common knowledge of what the trap will do should be very helpful in deciding for or against its use.

An automatic device is the best appliance to use for feeding boilers, and the question as to whether the water which is being supplied to the boiler be that of returns from pipe coils or hot water from a boiler feed-water heater has no bearing whatever on the practicability of a trap as a boiler feeder. The main essential is to provide the trap with water at a temperature of 100 degrees Fahrenheit or over. It will deliver the water to the boiler in quantities corresponding to the size of trap used. Therefore, it will be understood that the Lytton return trap, in addition to handling the condensation from any type of steam-using apparatus to which it may be attached, may also be used as an initial boiler feeder, taking the place of pump or injector.

The Lytton return trap will also take the place of a steam pump in returning the condensed water from a heating system back to the central plant. By using two traps, or the duplex system, it will take the place of a pump and governor in returning the water from steam-heated systems using very low steam pressure. An ordinary duplex boiler-feed pump requires from 95 to 125 pounds of steam per horse-power hour; a return trap consumes less than 10 pounds per horse-power hour. The steam used is only such as is condensed by the latent heat passing from it into the water in the trap while equalizing the pressure, which is all put back into the boiler.

A return trap requires no attention further than to repair the inlet and outlet check valves once in two or three years. It requires no cylinder lubrication; will not race or run away; never sticks; is noiseless; requires little room, and that in an out-of-the-way place.

The first experiments with the Lytton trap were conducted by using it as a vacuum trap. After having been in successful operation as a vacuum trap for 18 months it was then decided to place it on the market as a return trap. Upon examination of the accompanying sectional view and the description of this trap it will be seen that it is a practical device as a means for automatically removing water and oil from a vacuum.

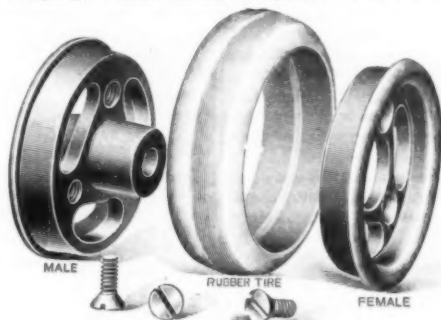
Conditions frequently make it necessary to remove condensation or oil from certain apparatus working under vacuum. Any variance as to the quantity of water at stated times, or variation in the vacuum, in no way affects the trap. It will work

ever seen; every contingency is provided for."

The Lytton return trap is manufactured by the Lytton Manufacturing Co., Franklin, Va., which issues a leaflet describing the device in detail, how it is installed, the economies it effects, etc.

Clark Rubber-Tired Wheels.

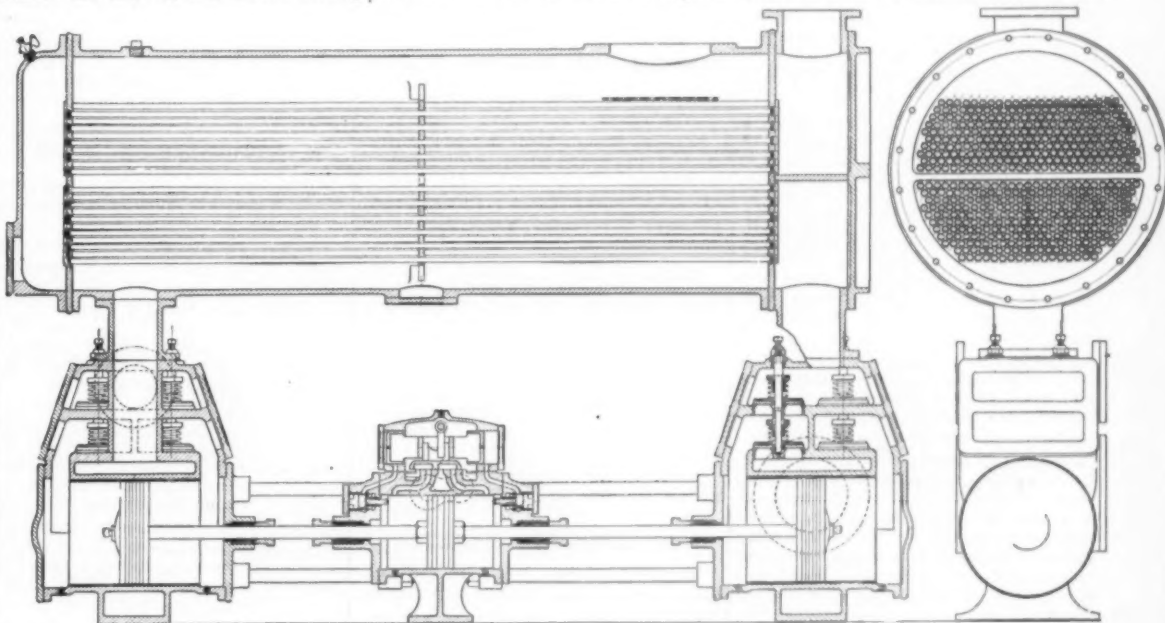
An accompanying illustration is a view of the rubber-tired wheel made by the George P. Clark Company, Windsor Locks,



CLARK RUBBER-TIRED WHEEL.

Conn., manufacturer of trucks, casters, etc. The construction of the wheel is such that old rubber tires can be replaced with new ones by anyone, even though not experienced in machine work. The only tool necessary is a common screwdriver to remove the three or four screws holding

The water chamber of the condenser rests directly on top of the water cylinder, and the circulating water passes upward from the water cylinder and through the lower bank of tubes, returning through the upper bank and out at the highest point of the water chamber. The arrangement



SURFACE CONDENSER OVER AIR AND CIRCULATING PUMPS.

the two sections together, to release the old tire and simply putting a new one in its place and attaching the two sections together again as tightly as possible.

This design of wheel is offered in three styles, namely, AA wheel, which is of light

is such that no air can lodge in the condenser tubes and impair their efficiency. Exhaust steam entering the top of the condenser near the circulating water outlet spreads along the entire length of the condenser before passing on its course down

turers in this country to promote their business by means of a national exposition to be opened at Quito, Ecuador, August 10. The Government of Ecuador has issued regulations providing facilities for foreign exhibitors.

Construction Department

TO OUR READERS!

In order to understand and follow up properly the Construction Department items, please bear in mind the following statements:

EXPLANATORY

The MANUFACTURERS' RECORD seems to verify every item reported in its Construction Department by a full investigation and complete correspondence with everyone interested. But it is often impossible to do this before the item must be printed, or else lose its value as news. In such cases the statements are always made as "rumored" or "reported," and not as positive items of news. If our readers will note these points they will see the necessity of the discrimination, and they will avoid accepting as a certainty matters that we explicitly state are "reports" or "rumors" only. We are always glad to have our attention called to any errors that may occur.

In correspondence relating to matters reported in this paper, it will be of advantage to all concerned if it is stated that the information was gained from the MANUFACTURERS' RECORD.

ADDRESS FULLY

To insure prompt delivery of communications about items reported in these columns, the name of one or more incorporators of a newly incorporated enterprise should be shown on the letter addressed to that town, or to the town of the individual sought, as may be shown in the item, as sometimes a communication merely addressed in the corporate or official name of a newly established company or enterprise cannot be delivered by the postmaster. This will help to insure prompt delivery of your communication, although it is inevitable that some failures on the part of the postal authorities to deliver mail to new concerns will occur.

WRITE DIRECT

It is suggested to advertisers and readers that in communicating with individuals and firms reported in these columns, a letter written specifically about the matter reported is likely to receive quicker and surer attention than a mere circular.

BRIDGES, CULVERTS, VIADUCTS

Annapolis, Md.—Anne Arundel county will repair draw of Curtis Creek bridge; bids to be opened February 9. Address County Commissioners. (See "Machinery Wanted.")

Austin, Texas.—C. E. Leonard, City Engineer, has been instructed to prepare plans and advertise for bids for construction of bridge across Shoal Creek on West avenue; International & Great Northern Railroad, Thomas J. Freeman, Houston, Texas, receiver, has contracted to pay one-half of cost, not to exceed \$1094.

Brownsville, Texas.—St. Louis, Brownsville & Mexico Railroad, E. C. Burgess, resident engineer, Kingsville, Texas, has, it is reported, awarded contract for construction of international bridge across Rio Grande at Brownsville, connecting this road with National Lines of Mexico. (Mentioned in November.)

Charlottesville, Va.—Highway bridge will be erected; 126-foot span; 20-foot truss; S. P. Maury, engineer; bids asked. (See "Machinery Wanted.")

Dungannon, Va.—Bids will be opened February 12 for construction of steel bridge over Clinch River at Dungannon; P. St. J. Wilson, State Highway Commissioner, Richmond, Va. (See "Machinery Wanted.")

Galveston, Texas.—The Manufacturers' Record is advised that engineers will prepare plans and specifications at once for causeway to connect Galveston Island with mainland; preliminary borings completed for foundation; general plan is to construct drawbridge with 100 feet clear waterway for vessels and 44 feet wide; 27 feet of width is for two standard-gauge railway tracks, and 17 feet for electric interurban railway and county highway; on each end of drawbridge will be reinforced concrete arch bridge about 1000 feet long; arches will have span of 70 feet and be 65 feet wide; of this width 29 feet is for two railway tracks, 15 feet for interurban railway, and 21 feet for county highway and city water main; balance of construction, about 4000 feet long, from shore line on each side of arch construction to be embankment, protected at toes with reinforced

concrete bulkhead and riprap; slopes protected by paving; top of embankment 110 feet wide, 50 feet being for steam railways, 27 feet for electric interurban railway, and 43 feet for county highway; height of rail above mean low tide, about 17 feet; estimated cost of causeway (exclusive of shore approaches, railway tracks and signals) is \$1,400,000; George E. Mann, Judge of Galveston county, Galveston, represents county. (Previously mentioned.) The Concrete-Steel Engineering Co., Edwin Thatcher and Wm. Muser, engineers, Park Row Bldg., New York, will complete plans and specifications for causeway by April 1. Mr. Thatcher will supervise construction; bids will be invited.

Golden, Okla.—Oklahoma & Golden City Railway, W. S. Hawkins, chief engineer, Pawhuska, Okla., will construct five large bridges, number of smaller ones and trestle work in connection with construction of railway.

Harrisonburg, La.—Police Jury of Catahoula parish, Jonesville, La., will erect bridge across Bayou Bushley recently mentioned; about 560 feet long, 14 feet wide, approximate cost \$15,000; plans and specifications to be submitted by builders; will also repair Jonesville bridge at probable cost of \$3500. (See "Machinery Wanted.")

Hearne, Texas.—City is considering construction of wagon bridge over Brazos River, estimated to cost \$16,000; P. L. Brady, Mayor.

Lynchburg, Va.—City will open bids February 15 for construction of reinforced concrete viaduct, recently mentioned; girder pattern; estimated cost, \$50,000, exclusive of approaches; H. L. Shaner, chief engineer, Lynchburg. (See "Machinery Wanted.")

Memphis, Tenn.—Legislative Council has approved proposed \$1,000,000 bond issue for bridge, sewer and street purposes. Address The Mayor.

Pensacola, Fla.—City Council is considering construction of viaduct at Gadsden and Tarragona streets, estimated to cost \$15,500. Address The Mayor.

Spartanburg, S. C.—Contract will be let February 5 for building covered wooden bridge and one stone abutment at Archer bridge site over Lawson's Fork; D. M. Miles, County Supervisor. (See "Machinery Wanted.")

Temple, Texas.—Gulf, Colorado & Santa Fe Railway, C. F. W. Felt, chief engineer, Galveston, Texas, will construct viaduct over Adams street, recently mentioned, with company's forces; structure will have width of 40 feet and span six tracks.

Tulsa, Okla.—Tulsa County Commissioners invite bids for construction of 17 steel bridges, cost of which is not to exceed \$15,000.

CANNING AND PACKING PLANTS

Augusta, Ga.—Frank Rouse will establish canning factory.

Brenham, Texas.—Alex. Harrison, Minneapolis, Minn., will establish canning factory at Brenham.

Cameron, Texas.—Canning Factory.—Alex. Harrison, Minneapolis, Minn., will install canning factory at Cameron.

Durant, Okla.—J. D. Danforth, St. Louis, Mo., proposes organization of company with \$10,000 capital stock to establish cannery in old factory; new and modern machinery to be installed.

Stuttgart, Ark.—Rice Mill.—Philip Rahm, New Orleans, La., has contract for erection of proposed 800-barrel rice mill at Stuttgart; contract for machinery awarded to Barnard & Leas, Moline, Ill.

Stuttgart, Ark.—Canning Factory.—A. B. Stevens will erect canning factory.

CLAYWORKING PLANTS

Ferris, Texas.—Texas Press Brick Co. incorporated by John Snyder, J. R. Wilson and A. A. Goble.

Morris, Okla.—Morris Brick & Coal Co. incorporated with \$30,000 capital stock by W. E. Kittel and Bruce White, both of Morris; J. C. Smith and A. C. Free of Okmulgee, Okla.

Wann, Okla.—Brick and Tile.—Cherokee Vitriified Brick and Tile Co. incorporated with \$100,000 capital stock by Alvin McNeal, Louis McNeal and David Pearson, all of Coffeyville, Kansas.

COAL MINES AND COKE OVENS

Barrellville, P. O. Pamosa, Md.—Cumberland Basin Coal Co., R. A. Hatfield, president, 1520 Real Estate Trust Building, Philadelphia, Pa., is erecting boiler-house and electric-power plant at Barrellville; buildings of fireproof construction; electric mining machinery is being installed; daily capacity, 1000 tons of coal; all contracts awarded; David Williamson, superintendent, Pamosa. (Recently mentioned.)

Hackett, Ark.—Hackett City Coal & Manufacturing Co., John E. Daley, president, reported incorporated in December with \$300,000 capital stock, has not yet completed plans for operation.

Harrison County, W. Va.—J. V. Thompson, Uniontown, Pa., has, it is reported, purchased about 2000 acres of coal lands in Harrison county for approximately \$250,000.

Milton, Okla.—Milton Coal Co. incorporated with \$2000 capital stock by Clayton L. Stoner, John H. Elton and William D. Ford.

Staunton, Va.—Red Ash Coal & Coke Co. incorporated with \$50,000 capital stock; J. S. Pancake, president; R. S. Turk, vice-president; C. R. Caldwell, secretary; J. N. McFarland, treasurer; purchased 2270 acres of coal land in Tazewell county, on which there is no operation; company will not undertake development, but expects to lease the property.

Strawn, Texas.—Thurber Coal Co. has, it is reported, purchased 2458 acres of coal land for development.

Tulsa, Okla.—Brummett Coal Co. incorporated with \$40,000 capital stock by T. E. Brummett, E. S. Harris, V. O. Johnson and others.

Wadestown, W. Va.—Newton Newcomer, Fayetteville, W. Va., has, it is reported, purchased 240 acres of coal land near Wadestown.

Whitley County, Ky.—Randolph Humble of Somerset, Ky., purchased 200 acres of coal land in Whitley county and will develop.

CONCRETE AND CEMENT PLANTS

Weatherford, Okla.—C. B. Blake and associates will organize company to build plant lately reported; \$500,000 bonds to be issued; plant will have daily output of 3000 barrels of Portland cement.

Yoakum, Texas.—J. J. Green and W. L. Funk will establish cement-brick factory with capacity of 3000 bricks daily.

COTTON COMPRESSES AND GINS

Durant, Okla.—Farmers' Gin & Manufacturing Co. incorporated with \$10,000 capital stock; P. Z. Harris, president; J. C. Collier, vice-president; C. N. McElreath, secretary-treasurer.

Ludowici, Ga.—L. Carter Company, Odum, Ga., contemplates establishing ginnery at Ludowici.

COTTONSEED-OIL MILLS

Goldthwaite, Texas.—C. H. Bencini, Fort Worth, Texas, will build cottonseed-oil mill at Goldthwaite.

Hamilton, Texas.—C. H. Bencini, Fort Worth, Texas, will build cottonseed-oil mill at Hamilton.

Monroe, Ga.—Southern Cotton Oil Co., main office, New York, is arranging to rebuild cotton-oil mill at Monroe recently reported burned at loss of about \$50,000. It is proposed to enlarge plant one-third.

Montgomery, Ala.—Charles Ellis of Brewton, Ala., planning organization of \$300,000 stock company to build cotton-oil mill with daily capacity of 80 tons and fertilizer factory with annual output of 15,000 tons.

Winters, Texas.—Winters Cotton Oil Co. incorporated with \$40,000 capital stock by W. H. Rogers, Winters; J. W. Johnson, San Antonio; Oscar Pearson, Ballinger and George Seelgson, Galveston.

ELECTRIC-LIGHT AND POWER PLANTS

Anadarko, Okla.—City has voted \$14,000 of bonds for improvement of electric plant. Address The Mayor.

Arkansas City, Ark.—Land & Power Co. awarded contract to Freeborn Engineering & Construction Co., Scarritt Bldg., Kansas City, Mo., for construction of power-house,

and to Allis-Chalmers Company, Milwaukee, Wis., for furnishing machinery; plant to be hydro-electric, with auxiliary steam plant; cost about \$40,000.

Carthage, Texas.—Carthage Ice & Electric Co. incorporated with \$20,000 capital stock by John C. Whitney, M. E. Pittman and J. G. Woolworth.

Colquitt, Ga.—City will vote on issuance of \$15,000 of bonds for electric-light and water system extension. Address The Mayor.

Dothan, Ala.—Choctawhatchee River Light & Power Co. has sold controlling interest to Morris Lumber Co. and new officers have been elected; A. C. Kelley is president, G. S. Kelley vice-president and general manager, A. L. Kelley secretary and treasurer; will at once begin construction of water-power-electric plant to develop and transmit 4000 horse-power by electricity. Address president at Slocumb, Ala. (Company previously reported incorporated with capital stock of \$1,000,000.)

Douglasville, Ga.—City Council is considering granting franchise to Atlanta firm for installation of electric-light plant. Address The Mayor.

Easley, S. C.—Easley Oil Mill contemplates installation of electric-light equipment; capacity, about 1000 incandescent and 15 arc lights; no boiler needed. Address P. Cemp Johnson, superintendent. (See "Machinery Wanted.")

Fredericksburg, Va.—The Electric Generating Co. incorporated with \$100,000 capital stock; E. J. Smith, president; Isaac Hirsh, vice-president; Alvin T. Embrey, secretary-treasurer; latter telegraphs Manufacturers' Record company will build plant to include 1300-kilowatt rotary field and stationary armature direct connected by horizontal turbine water-wheel; two 38-kilowatt direct-current exciters direct connected with flexible couplings; 25-ton three-motor traveling cranes; building to be 42x90 feet; plant to cost \$150,000; engineer in charge, R. M. Vandorn, Exchange Hotel, Fredericksburg.

Fredericksburg, Va.—Fredericksburg Electric Co. incorporated with \$35,000 capital stock; R. M. Vandorn, president; C. W. Jones, vice-president; Alvin T. Embrey, secretary-treasurer.

Gilmer, Texas.—Gilmer Light, Ice & Power Co. incorporated with \$40,000 capital stock by Thomas E. Barnwell, Lewis Monroe and Judie E. Barnwell.

Greensboro, N. C.—Bird S. Coler and Leonard H. Hole, acting for W. N. Coler & Co., 43 Cedar St., New York, have, it is reported, purchased Greensboro Electric Co., and contemplate improvements to property, including erection of gas plant and extension of mains. North Carolina Public Service Co. will be incorporated with \$3,500,000 capital stock and privilege of increasing to \$5,000,000.

Gulfport, Miss.—Gulfport & Mississippi Coast Traction Co. will build battery-house and small carhouse; in latter will be located office and transformer station.

Hattiesburg, Miss.—Hattiesburg Traction Co. has, it is reported, instructed its agents to contract for building of power plant, erect poles and trolleys, etc.; cost of plant about \$100,000. (Previously mentioned.)

Highland Park, Va.—City will receive bids for supplying town with electric lighting on 25-year charter; W. P. Redd, Mayor, 601 Third Ave., Highland Park, Richmond, Va. (See "Machinery Wanted.")

Hobart, Okla.—Hobart Water-Power Co., recently reported incorporated, will build water-power-electric plant to distribute 7500 horse-power by electricity for operation of proposed Hobart Interurban Railway (300 miles) and for lighting and power in cities on railway's route; engineering work in progress and will be completed in 90 days; construction to begin by April 15; president, C. T. Blake; vice-president, H. H. Hoover; secretary, R. E. Nye; treasurer, J. H. Montgomery; offices at 207 East 4th street; Hobart Water-Power Co. is subsidiary to railway company.

Kansas City, Mo.—Kansas City Southeastern Traction Co. contemplates installation of single alternating-current electric machinery for power for electric traction line.

Oakland, Md.—Oakland, Swallow Falls & Uniontown Electric Railway Co., J. B. Hogg, Connelleville, Pa., will, it is reported, erect power plant about six miles north of Oakland.

Oklahoma City, Okla.—Hodge-Scott Electric Co. incorporated with \$3000 capital stock

by D. L. Hodge and D. L. Scott, both of Oklahoma City, and D. A. Scott, Hobart, Okla.

Opelousas, La.—Board of Aldermen adopted report recommending issuance of \$35,000 of bonds for improvements to electric-light and water plants and \$5000 for extension of water and light service. Address The Mayor.

Paintsville, Ky.—Harry A. Loche, 547 Drexel Bldg., Philadelphia, Pa., has purchased municipal franchise for electric-light and water plants; will begin construction in about four weeks; population, over 2500. (See "Water-works.")

Rockford, Tenn.—Rockford Cotton Mills, Ernest Koella, manager, 2336 Highland Ave., Knoxville, Tenn., will rebuild burned plant for furnishing electricity to light mill and town; dam develops power for electric plant and cotton mill.

Russellville, Ark.—Russellville Water & Light Co., A. Brewster, Pine Bluff, Ark., president, previously stated to establish plant furnishing Russellville with light and water and cities within radius of 50 miles with light, has taken over franchise of Russellville & Ozark Mountain Light & Transit Co.; light plant built by original company will be equipped with additional machinery, including one 150-kilowatt generator, to be used in conjunction with 100-kilowatt machine now in service; silent link belts for both generators. Fred Wilson, Pine Bluff, Ark., has contract for construction of power-house and dam on Illinois River near Russellville, where there is a fall of 22 feet; dam when completed will be 400 feet wide, with 25-foot head of water; four turbine wheels will develop about 500 horse-power; reservoir will be built on top of 163-foot hill from base of dam, and water will be pumped into reservoir from river below; estimated that \$50,000 will be cost of dam, race, powerhouse and reservoir. Contracts for equipment of water-works system will be let during coming spring and summer.

Taylor, Texas.—Citizens' Light & Power Co. increased capital stock from \$20,000 to \$40,000.

Willacoochee, Ga.—Plans are being prepared. It is reported, for construction of electric-light plant; J. B. McCrary & Co., engineers, Atlanta, Ga., to have charge of construction.

FLOUR, FEED AND MEAL MILLS

Buckingham, Va.—LeSueur Bros. will establish mill on site of burned Hocker's mill; construction has begun.

Hargrove, N. C.—Flour, etc.—Tar Valley Manufacturing Co. is name of company recently noted incorporated with \$150,000 capital stock; W. D. Kimball, president; W. R. Kimball, secretary and treasurer; A. B. Kimball, vice-president; has ordered machinery; mill to have daily capacity of 75 barrels flour, 500 bushels meal and 30 tons feed.

Leesville, Va.—Flour.—Owen & Hunt, Sycamore, Va., recently noted to build flour mill at Leesville, will erect structure 28x48 feet; ordinary construction; cost not estimated; capacity of mill, 60 barrels daily.

Lincolnton, N. C.—Banner Roller Mills incorporated with \$50,000 capital stock by R. J. Ramsaur and others.

Roanoke, Va.—Gambrell & Davis telegraphed Manufacturers' Record they have formed no definite plans as to rebuilding their mill reported burned at loss of \$100,000; daily capacity 250 barrels of flour and 2000 bushels of meal.

Salem, Va.—Roanoke Valley Milling Co. organized by R. W. Kime, John E. H. D. and W. S. Shank; will establish 100-barrel flour, corn and feed mill; contract for machinery awarded to Salem Foundry and Machine Works, Salem.

FOUNDRY AND MACHINE PLANTS

Athens, Tenn.—Machines.—W. Z. Long, J. W. Bayless, L. W. Lowe and others are promoting establishment of machine shop in Athens.

Atlanta, Ga.—Culverts.—Dixie Culvert & Metal Co., C. C. Fouts, president, previously reported incorporated with \$100,000 capital stock (under "Birmingham, Ala."), will establish plant in Atlanta; to be Southern headquarters, with branch plant at Little Rock, Ark.; is installing machinery and will operate within 30 days; will manufacture corrugated culverts for railways and public roads; will also represent American Rolling Mill Co., Atlanta.

Bartlesville, Okla.—Iron Foundry.—Eastern Iron & Supply Co. incorporated with \$10,000 capital stock by H. L. Levy, A. Minsky, C. E. Fink and J. Fenberg.

Bessemer, Ala.—Bessemer Solipipe Co., recently noted, will double capacity of plant; will have 25 pipe floors, 40 fitting floors and

2 equipment floors; cost of improvements about \$30,000.

Carthage, Mo.—Stout-Parke Foundry and Machine Works will rebuild plant reported burned.

Covington, Ky.—Iron Works.—American Fence & Iron Works Co. incorporated by Jos. R. Stevens, C. C. Weber, Frank L. Branson and others.

Enid, Okla.—Implements.—Enid Foundry and Machine Shops, recently reported incorporated, will establish plant to manufacture implements; will erect building 56x100 feet at cost of \$7000; will install lathes, drills, planer, Keyseater, etc.; capacity, five tons implements daily; A. C. Lang, president and manager. (See "Machinery Wanted.")

Hattiesburg, Miss.—Sawmill Machinery.—Wheland Machine Works will not establish foundry for manufacture of sawmill machinery. (Recently incorrectly reported.)

Houston, Texas.—Foundry.—South Houston Stove & Foundry Co. incorporated with \$30,000 by C. S. Wood, R. P. Christian and G. H. Holliday. (Previously noted.)

Oxford, N. C.—Stemming Machines.—Company organized with \$3,000,000 capital stock; Chas. A. Gregory, Winston-Salem, N. C., president; to establish plant in Oxford for manufacturing machines for stemming tobacco; each machine to have capacity of from 1200 to 1800 pounds daily.

Richmond, Va.—Heating and Plumbing Apparatus.—Continental Heater & Radiator Co. incorporated with \$300,000 capital stock; Reuben Burton, president; Edwin B. Sadler, vice-president and engineer; A. A. Pizzini, secretary and treasurer; at present, work is out on contract; company contemplates building later; offices at 409 Mutual Building.

Spartanburg, S. C.—Agricultural Implements.—Andrews Loom, Reed and Harness Works purchased plant of Morgan Wood & Iron Works and will continue operations; will install machinery for manufacturing agricultural implements.

St. Louis, Mo.—Iron Foundry.—Campbell Iron Co., 617 North 2d St., will erect foundry building; 123x133 feet; three stories; estimated cost, \$50,000.

Tampa, Fla.—Tampa Foundry & Machine Co. will install electric-power plant to furnish current for 66-cycle shop motor. (See "Machinery Wanted.")

Watkinsville, Ga.—Machine Shop.—A. C. Elder will rebuild machine shop recently reported burned; structure 22x50 feet; fireproof; cost \$2500; will install wood and iron working machinery; proposals for machinery to be opened February 15. (See "Machinery Wanted.")

GAS AND OIL DEVELOPMENTS

Bartlesville, Okla.—Washington County Gas Co. incorporated with \$50,000 capital stock by J. C. McDowell, Thomas G. Gorman and Wm. N. Davis.

Bartlesville, Okla.—Armstrong Oil Co. incorporated with \$10,000 capital stock by D. B. Mason, C. T. Burns and C. A. Lamm.

Bartlesville, Okla.—Dawson Oil Co. incorporated with \$25,000 capital stock by John B. Baird, James Brann and H. H. McClintock.

Gibbsland, La.—Gulf Coast Gas & Oil Co. organized with \$500,000 capital stock by C. W. Hammer, R. Colbert, A. J. Pennington and others; company owns or controls by lease about 50,000 acres in Louisiana and will bore two test wells in Bossier Parish, two in Bienville, one in Webster and one in Jackson; Gibbsland office in charge of R. Colbert, at Gibbsland State Bank; Shreveport office in charge of S. R. Lippincott, Continental Bank & Trust Co.

Houston, Texas.—Paova Oil Co. incorporated with \$5000 capital stock by G. W. Menis, G. M. Sowden and J. A. Camp.

Jet, Okla.—Grant County Oil, Gas & Mineral Co. incorporated with \$25,000 capital stock by F. P. Gary, D. M. Owings, both of Jet, and C. M. Owen, Florence, Okla.

Minden, La.—Southern Oil Co. organized with \$100,000 capital stock; S. J. Webb, president, treasurer and general manager; R. D. Webb, vice-president; N. R. Grishy, secretary; will develop gas and oil deposits in Webster parish.

New Orleans, La.—Consolidated Oil Co. incorporated with \$16,500 capital stock by R. E. O'Neill, Andre Sachee, J. B. Enard and others; company is reorganization of Jennings Oil Co.

St. Louis, Mo.—Oklahoma-Tulsa Oil & Gas Co. incorporated with \$50,000 capital stock by Wm. A. Cann, Albert Meyer, both of St. Louis; John D. Porter, Tulsa, Okla., and others.

St. Louis, Mo.—Oklahoma-Tulsa Oil & Gas Co. incorporated with \$50,000 capital stock by

Wm. A. Cann, Albert Meyer, James M. Patterson and others.

Texarkana, Ark.—Trout Oil Co. incorporated with \$25,000 capital stock by William Buchanan, J. A. Buchanan and Wm. C. Brown.

Tulsa, Okla.—Marietta Oil & Gas Co. incorporated with \$30,000 capital stock by C. F. Speary, J. H. Pringle and Charles Richardson.

Walnut Hill, Ark.—Arkansas Oil, Gas & Mineral Co. incorporated with \$25,000 capital stock; T. J. Dooley, president; T. W. Maryman, vice-president; R. H. Duty, secretary.

ICE AND COLD-STORAGE PLANTS

Athens, Tenn.—W. Z. Long, J. W. Bayless and others are interested in establishment of ice and cold-storage plant in Athens.

Carthage, Texas.—Carthage Ice & Electric Co. incorporated with \$20,000 capital stock by John C. Whitney, M. E. Pittman and J. G. Woolworth.

Clinton, S. C.—J. H. Young and A. B. Blakely will establish ice plant of five tons daily capacity; machinery purchased.

Gilmer, Texas.—Gilmer Light, Ice & Power Co. incorporated with \$40,000 capital stock by Thos. E. Barnwell, Lewis Monroe and Judie E. Barnwell.

Hamlin, Texas.—Orient Consolidated Pure Ice Co. (M. Greenspun and others) will establish 20-ton ice plant recently mentioned; machinery purchased.

Montgomery, Ala.—Charles Ellis of Brewton, Ala., contemplates installation of ice plant in connection with fertilizer factory and cotton oil mill. (See "Cottonseed Oil Mills" and "Miscellaneous Manufacturing plants.")

Ocala, Fla.—Ocala Manufacturing Co. awarded contract to York Manufacturing Co., York, Pa., for erection of addition to ice plant; frame; capacity, 30 tons; light furnished by city plant; cost, including machinery, \$12,000. (Recently mentioned.)

Wichita Falls, Texas.—People's Ice Co., recently reported incorporated, has organized with \$25,000 capital stock; P. Marcus, president; A. Marcus, vice-president; M. A. Marcus, secretary; will establish ice plant with capacity of 45 tons daily.

IRON AND STEEL PLANTS

Bristol, Tenn.—Iron Furnace.—Virginia Iron, Coal & Coke Co., general offices, Roanoke, Va., will not undertake any improvements to Bristol furnace in the near future; contemplates extensive improvements during the summer. (Recently reported.)

LUMBER-MANUFACTURING PLANTS

Arkansas.—A. J. Carden, Hot Springs, Ark., has purchased 1000 acres timber in Monroe and Phillips counties; will build mill, to be operated by A. J. Carden Lumber Co.; Mr. Carden's present address, 247 Floyd St., Louisville, Ky.

Beaumont, Texas.—Industrial Lumber Co., S. Park, president, recently reported incorporated, will continue operation of plant; Sam Park, president; Newton R. Wilson, vice-president; R. M. Halliwell, treasurer; E. T. Brough, secretary; no change in capital stock.

Beaumont, Texas.—Kirby Lumber Co. will erect new planer to replace one recently dismantled; capacity to be double that of old plant; will erect new drykilns.

Birmingham, Ala.—C. M. Dunning & Co. will install sawmill with daily capacity of 15,000 to 20,000 feet and veneer equipment. (See "Machinery Wanted.")

Blytheville, Ark.—Blytheville Shingle & Lumber Co. incorporated with \$10,000 capital stock; T. B. Morris, president.

Charleston, Miss.—Lamb-Fish Lumber Co. will not enlarge plant at present. (Recently incorrectly reported.)

Denham Springs, La.—Mr. Kennedy has purchased tract of hardwood timber land and will establish mill.

Dodge, Texas.—Somers Bros., Nacogdoches, Texas, will, it is reported, establish sawmill at Dodge.

Dunn, N. C.—Tilghman Lumber Co., Norfolk, Va., will establish plant at Dunn.

Dunn, N. C.—Newberry Bros. & Cowell will erect planing mills and housefurnishing plant to replace burned structure.

Dunn, N. C.—C. B. Aycock, Dunn, and Oscar Aycock, Smithfield, N. C., will establish lumber and planing mill at Dunn.

Fayetteville, N. C.—Racoorda Lumber Co. incorporated with \$50,000 capital stock by Milton Ray, J. F. L. Armfield and others.

Foley, Ala.—Perrido Bay Export Lumber & Shingle Co. will be organized to establish mill for development of pine and cypress timber on land in Baldwin county recently purchased by D. R. Petecet, president of Magnolia Shingle Co. of Foley, and others. (See "Miscellaneous Enterprises.")

Fullerton, La.—Gulf Lumber Co., main offices, St. Louis, Mo., is reported as to build a second mill of same daily capacity as present plant; capacity is 200,000 feet of lumber.

Glen Inglis, N. C.—Glen Inglis Company incorporated with \$50,000 capital stock by J. A. Martin, J. E. Patton and Locke Craig.

Hopkinsville, Ky.—W. S. Barnett and Lee Oldham, Madisonville, Ky., and Odie Davis, Hopkinsville, have purchased plant of Hopkinsville Lumber Co. and will continue operations under name of Planters' Lumber Co.; will increase facilities and operate in connection with lumber yard and planing mill in Madisonville.

Jamesville, N. C.—Jamesville Lumber Co. incorporated with \$60,000 capital stock by Harvey C. Wheeler, Wm. H. Brew and others.

Judson, N. C.—Whiting Manufacturing Co., Asheville, N. C., will establish lumber plant in Judson; will erect building 160x80 feet; equipment to consist of 250-horse-power Corliss engine, two hardwood flooring machines, two inside molders, double surfacer and matcher with 8 resaw; will also erect three fireproof brick and concrete kilns 132 feet long with concrete roofs, and storage shed 350x125 feet; construction begun.

Kansas City, Mo.—Tri-State Lumber Co. incorporated with \$25,000 capital stock by George H. Hodges, Frank Hodges, E. T. Pickett and others.

Leggett, Texas.—Thompson & Tucker Lumber Co., Willard, Texas, will establish lumber plant at Leggett. (Recently incorrectly noted as Thompson Bros. Lumber Co., Doucette, Texas.)

Linside, W. Va.—Monroe Lumber Co., incorporated with \$25,000 capital stock, has purchased timber rights on 615 acres of land in Monroe county and will develop; president, J. S. Denison; vice-president, A. C. Pifer; general manager, H. D. Denison; secretary and treasurer, W. H. Mason; office, Elkins, W. Va.; no further machinery needed.

Memphis, Tenn.—J. S. Vaughn Lumber Co. incorporated with \$40,000 capital stock by Chas. E. Thomas, Ed W. Weise, Raymond Brattain and others.

Memphis, Tenn.—N. Butler Haynes Timber Co. incorporated with \$50,000 capital stock by N. B. Haynes, A. H. Murray, George P. Pope and others.

Memphis, Tenn.—J. S. Vaughn Lumber Co. incorporated with \$40,000 capital stock by Charles E. Thomas, Edward W. Weise, J. Shelley Vaughn and others.

Monroe, La.—Central Immigration, Real Estate & Loan Co. has purchased 18,150 acres of hardwood timber land at \$34,500, and will probably develop.

Nashville, Tenn.—Logan-Maphet Lumber Co. incorporated with \$40,000 capital stock by J. M. Logan, Ed Maphet, A. J. Price and others.

Norfolk, Va.—Nufer-Fosburg Corporation incorporated with \$50,000 capital stock; E. C. Fosburg, president; W. L. Nufer, vice-president; J. M. Gibbs, secretary.

Norfolk, Va.—Surry Lumber Co., main offices in Union Trust Bldg., Baltimore, Md., will build planing mill with daily capacity of about 200,000 feet of lumber; purchased site of 36 acres fronting 700 feet on Elizabeth River; will install from 15 to 20 machines and accompanying equipment; size and character of buildings not determined, but concrete construction will be considered; will use either electric or steam power; may build box-shook factory in future; will also build docks, construct railway switches and provide other facilities.

Opelika, Ala.—Alabama Lumber & Export Co. incorporated with \$25,000 capital stock to manufacture and deal in yellow-pine lumber; Jos. H. Smith, president; R. J. Miles, vice-president; John J. Earle, vice-president and general manager; S. M. Puckett, secretary and treasurer.

Pearisburg, Va.—Nobusiness Lumber Co. has completed purchase of 25,000,000 feet of timber in Bland county; has constructed incline connecting with railway; company's mills now in operation.

Sawyer, Okla.—Hill Mill & Lumber Co. incorporated with \$5000 capital stock by J. H. Hill, Charleston, Mo.; R. M. Conkling, Checotah, Okla., and W. West, Hugo, Okla.

Sewell, W. Va.—F. O. Havener, Parkersburg, W. Va., and Pittsburg associates have taken over Sewell Lumber Co. and purchased

for development 7500 acres of timber land in Fayette county; lands estimated to contain over 75,000,000 feet of oak, poplar, hemlock, etc.; will build heavy band mill with daily capacity of 50,000 feet of lumber, kilns for drying entire output, and circular-saw mill for timbers up to 60 feet long; will construct logging railway (narrow-gauge) with 35-pound steel rails; several miles already contracted for; logging by long-distance cable steam skidder system; annual output of plant to be 15,000,000 feet of lumber; about \$250,000 will be invested; Mr. Havener is president and F. R. Babcock vice-president of Sewell Lumber Co.; main offices at Parkersburg, W. Va.

Spring, Texas.—Willow Lumber Co. has issued statement denying sale of plant and timber lands to Empire Timber & Lumber Co. of Beaumont, Texas, as recently incorrectly reported.

Summit, Ga.—Calhoun Lumber Co., Savannah, Ga., has, it is reported, purchased tract of virgin pine in Summit and will establish mill to cut the timber.

Talisheek, La.—Andrew L. Thompson, First National Bank Bldg., Chicago, Ill., has purchased 22,500 acres of timber land near Talisheek; telegraphs Manufacturers' Record he is not ready to state details of plan for development.

Waco, Texas.—E. E. Cammack will erect sawmill recently reported; corrugated-iron building of ordinary construction; cost \$1200; 50x100 feet; machinery purchased; daily capacity, about 10,000 feet lumber; addition of box factory contemplated. (See "Woodworking Plants.")

Wadesboro, N. C.—Brick & Lumber Co. incorporated with \$50,000 capital stock by W. T. Bassington and others.

MINING

Arkansas.—Diamonds.—American Diamond Mining Co. incorporated with \$1,000,000 capital stock; John W. Kress, president; Reece Lamb, vice-president; F. G. Hudson, second vice-president; John J. Potts, secretary and treasurer, all of Monroe, La.; will operate diamond mines in Arkansas.

Durant, Okla.—Zinc, etc.—Bryan County Improvement & Development Co., recently noted (under "Miscellaneous Enterprises"), is incorporated with \$30,000 capital stock; A. J. Sparger, president; G. M. Stevens, vice-president; L. W. Weber, secretary; Geo. Harris, treasurer, all of Durant; will mine for zinc, etc.; L. Varner Stinson, Durant, engineer in charge.

Gold Hill, N. C.—Copper.—William H. Geraghty, Trenton, N. J., and Frank Van Wageningen, New York, have purchased property of Gold Hill Copper Co. in Rowan county, consisting of several hundred acres of mining land and machinery.

Jefferson, Md.—Copper.—Catoctin Mining Co. (H. B. Debring, 42 South Market St., Frederick, Md., and others) has leased about 85 acres of land near Jefferson and will prospect for ore.

Marcella, Ark.—Lead, Gold, Silver, etc.—White River Mining Co. is name of company recently reported incorporated with \$300,000 capital stock; H. Bettes, president; C. H. Graham, vice-president; J. H. Vibber, secretary and treasurer.

Russellville, Ala.—Iron Ore.—H. F. DeBardeleben of Birmingham, Ala., and associates have purchased several hundred acres of iron-ore land near Russellville, will build washers and mine the ore.

Russellville, Ala.—Iron Ore.—Sheffield Coal & Iron Co., Wm. Edenborn, president, 907 Maritime Bldg., New York, has leased for 10 years iron-ore lands near Russellville, will build washer and develop the land adjoining, which is owned by company.

Webb City, Mo.—Lead and Zinc.—Barr, Gloninger & Walsh awarded contract to United Iron Works Co., Joplin, Mo., for erection of 300-ton mill on lease of Apache Maid mine. (Recently mentioned.)

Winnfield, La.—Marble.—Southern Mineral & Land Co. will install 200-ton crushing mill at marble quarry.

MISCELLANEOUS CONSTRUCTION WORK

Chicot County, Ark.—Levee.—Bids will be opened at U. S. Engineer office, Vicksburg, Miss., February 10, for enlargement of Fulton Lake levee, in Chicot county; contents about 200,000 cubic yards; J. Q. Graves, president Board of Commissioners, Fensas Basin Levee District, Columbia, La. (See "Machinery Wanted.")

Estherwood, La.—Flume.—Morris Canal Co., Ellis Hoffmann, manager, will build flume; to have two thicknesses of cypress lumber.

Galveston, Texas.—Wharf.—Galveston Wharf Co., Jeff Davis, manager, will erect pier costing \$250,000 to replace structure recently reported burned.

Galveston, Texas.—Pier.—R. L. Bettison awarded contract to Charles Funk of Galveston for erection of fishing pier on south side of north jetty; structure to be 110 feet long and about 50 feet wide; crescented round piling 10 feet apart; gallery 8 feet wide around entire pier; two stories; dining-room, bath, etc., on first floor; 25 sleeping-rooms, with bathrooms, etc., on second floor; gasoline engine to be installed for pumping water to bathrooms; estimated cost, \$8000. Mr. Bettison and associates will incorporate company with \$10,000 capital stock.

Gueydan, La.—Canal.—Caesar Broussard and associates have awarded contract for digging approximately four miles 20-foot canal; to connect with main system; cost about \$1000 per mile; C. D. Babbitt, Gueydan, engineer in charge. (Recently mentioned.)

Mercedes, Texas.—Irrigation Canal.—W. S. Chaplin, president of American Rio Grande Land & Irrigation Co., writes Manufacturers' Record that recent reports are premature in announcing formation of company to build high-level irrigation canal; money has been provided for preliminary survey to determine whether canal is feasible or not; survey will be completed in a few months and then company may be formed.

Port O'Connor (not a postoffice), Texas.—Docks and Wharves.—Port O'Connor, Rio Grande & Northern Railroad, F. B. Lander of Victoria, Texas, secretary, will, it is reported, expend \$500,000 at Port O'Connor for docks and wharves; little dredging will be required, as water is now from about 29 feet deep.

Raleigh, N. C.—Land Reclamation.—It is proposed to drain swamp lands in Eastern North Carolina, especially Lake Matamuskeet (in Hyde county), property of the State; surrounding land owned by private persons; lake is 13 miles long and 6 miles wide, has average depth of 5 feet and covers about 50,000 acres; Dutch system of pumps and dykes must be used for drainage. J. O. Wright of U. S. Agricultural Department, who has made complete survey of lake and surrounding lands, estimates that lake can be drained for \$400,000, and that after plant is installed it will require only 30 days to pump out water; this can be done through two canals in Pamlico Sound. It is then estimated that cost of keeping drainage complete will be \$15,000 a year; actual extent of land to be drained, 130,000 acres; Alligator River to be dyked to prevent overflow. It is preferred that State undertake the work, but citizens agree to organize company if State will give land thus made available. W. W. Kitchen, Governor, and legislative committees have given a hearing, and proposition will be fully submitted to Legislature.

South Bend, Ark.—Levee.—Bids will be opened February 16 for enlargement of levee at Heckatoo, in Lincoln county, amounting to about 35,000 yards, and for about 5000 yards at Churchill Place, below South Bend. Gus Waterman, chairman Linwood and Auburn Levee Board, Dumas, Ark. (See "Machinery Wanted.")

MISCELLANEOUS ENTERPRISES

Alexandria, Va.—Printing.—Carpenter Printing Co. incorporated with \$5000 capital stock; B. H. Brockway, president, 510 M Street N. W.; W. S. Carpenter, secretary and treasurer, 621 13th street N. W., both of Washington, D. C.

Ardmore, Okla.—Publishing.—Union Publishing Co. incorporated with \$25,000 capital stock by J. K. Armstrong, J. T. Taylor and Annie A. Armstrong.

Athens, Tenn.—Steam Laundry.—W. Z. Long, J. W. Bayless, J. W. Lowe and others are interested in establishment of steam laundry in Athens.

Baltimore, Md.—Steamship Line.—Merchants & Miners' Transportation Co., Joseph C. Whitney, president, Light and German Sts., has authorized steamship line from Baltimore to Jacksonville, Fla., via present line to Savannah, Ga.; reported to expend several hundred thousand dollars in improvements to steamship terminal at Jacksonville, including erection of wharves, warehouses, etc.; no details have been determined; site comprises 20 acres, fronting 800 feet on St. John's River.

Bentonville, Ark.—Construction.—Arkansas Co-operative Construction Co. incorporated with \$400,000 capital stock; A. W. Morris, president; H. A. Luekens, vice-president; J. W. Blocher, secretary; Dwight Dickson, treasurer.

Bessemer, Ala.—Wireless Telegraphy.—Mc-

Laws & O'Neill, Birmingham, Ala., are interested in establishment of wireless telegraph station in Bessemer.

Birmingham, Ala.—Iron.—Piper-Rust Iron Co., C. E. Piper, president, recently reported incorporated with \$12,000 capital stock (under "Foundry and Machine Plants"), will operate iron brokerage business.

Birmingham, Ala.—Electrical.—Fruitticher Electrical Co. incorporated with \$10,000 capital stock; W. H. Fruitticher, president; Geo. A. Leath, vice-president; E. W. Fruitticher, secretary and treasurer.

Birmingham, Ala.—Printing.—W. H. Hafey awarded contract to F. C. Connors, Birmingham, for erection of two-story frame printing plant; ordinary construction; hot-air heat; electric lighting; cost \$400.

Boonville, Mo.—Publishing.—Mitchell Publishing Co. incorporated with \$10,000 capital stock by Harry M. Mitchell, Tabitha E. Mitchell and Helen E. Crome.

Bradentown, Fla.—Printing.—Bradentown Publishing Co. will erect building for printing office and offices; plans by Bonniwell & Son, St. Petersburg, Fla.; two-story structure; pressed-brick front, plate glass, etc.; rear and side walls of natural limestone; ordinary construction; cost about \$7000; bids opened about February 8.

Centerville, La.—Mercantile.—Centerville Mercantile Co., Ltd., incorporated with \$15,000 capital stock; W. J. Young, president; Narcisse Alleman, vice-president; Byron W. Eells, secretary and treasurer.

Columbus, Ga.—Grain.—E. L. Stanley Company incorporated with \$15,000 capital stock by E. L. Stanley and H. M. Bagley.

Columbia, S. C.—Publishing.—Evening Sun Co. organized with \$25,000 capital stock by James A. Hoyt, Carolina National Bank Bldg.; M. L. Kinard and George L. Baker, to publish afternoon newspaper in Columbia; Mr. Hoyt will be editor and general manager.

Comanche, Texas.—Construction.—Martin-Holderness-Cates Construction Co. incorporated with \$10,000 capital stock by William Martin, C. S. Cates and E. J. Holderness.

Dallas, Texas.—Automobiles.—Rambler Automobile Co., Kenosha, Wis., will establish Southwestern headquarters in Dallas; will erect three-story basement building; brick and terra-cotta; high-power elevator; cost \$75,000, which building company has leased for five years.

Dallas, Texas.—Automobiles.—Buick Automobile Co. incorporated with \$50,000 capital stock by F. W. A. Vesper and Oscar Norris of Dallas and W. J. Mead, Chicago, Ill.

Elgin, Texas.—Groceries.—Fromme Grocery Co. incorporated with \$25,000 capital stock by J. C. Orgain, Ben Fromme and James Keeble.

Emporia, Va.—Land Improvement.—Colony Development Co. incorporated with \$50,000 capital stock; A. F. Kearney, president, Mt. Jackson, Va.; E. L. Eanes, vice-president; O. C. Haas, secretary and treasurer, both of Emporia.

Foley, Ala.—Land Development.—Pardido Bay Land Co. proposes to develop into farming lands, truck farms and winter homes the large tract of land in Baldwin county recently purchased by D. R. Petet, president of Magnolia Shingle Co. of Foley, and others; also contemplates making preserve of fresh-water lakes, erecting clubhouse and cottages, installing boats, etc. (See "Lumber Manufacturing Plants.")

Francis, Okla.—Land Improvement.—Francis Development Co. incorporated with \$10,000 capital stock by S. M. Richey, J. P. Lathrop, W. M. Benson and others.

Frankfort, Ky.—Printing.—Frankfort Printing Co. has increased capital stock from \$20,000 to \$30,000.

Galveston, Texas.—Amusement Company.—Galveston Electric Park & Amusement Co. has increased capital stock from \$15,000 to \$30,000.

Gastonia, N. C.—Mercantile.—Thompson Mercantile Co. incorporated with \$100,000 capital stock by James F. Thompson, Robert A. Lane and John R. Lane.

Gastonia, N. C.—Mercantile.—Thompson Mercantile Co. incorporated with \$100,000 capital stock by James F. Thompson, Robert A. Lane and John R. Lane.

Grafton, W. Va.—Lumber and Hardware.—Fortney Lumber & Hardware Co. incorporated with \$5000 capital stock; L. H. Ayer, president; M. E. McClain, vice-president; D. W. Fortney, treasurer, secretary and manager.

Greensboro, N. C.—Laundry.—Dick's Laundry Co. incorporated with \$50,000 capital stock by J. H. Gotter, B. A. Merrimon and M. W. Steine.

Houston, Texas.—Fig and Orange Cultivation.—Houston Fig and Orange Syndicate, 419 Paul Bldg., S. H. Huston, manager, recently reported incorporated with \$5000 capital stock, conducts fig and orange development enterprise.

Houston, Texas.—Land Development.—Port Houston Land & Townsite Co. organized with W. C. Munn, president; J. S. Rice, vice-president; W. N. Mayfield, Jr., secretary; E. F. E. Pye, treasurer; company will develop 560 acres of land adjoining turning basin purchased at a cost of \$125,000.

Houston, Texas.—Land Development.—Magnolia Park Land & Development Co., J. R. Cheek, president, has purchased 431 acres of land in Magnolia Park; will subdivide and develop as residential section.

Huntington, W. Va.—Land Improvement.—Neel Realty & Improvement Co., 7 American Bank Bldg., incorporated with \$25,000 capital stock; C. W. Campbell, president; Rudd T. Neel, vice-president and general manager; Wm. H. Gideon, secretary and treasurer; will handle real estate, erect dwellings and deal in builders' supplies; will probably increase capital during year.

Independence, Mo.—Publishing.—Kansas City Spirit Publishing Co. incorporated with \$15,000 capital stock by Henry D. Whelan, Will H. Bryant, William Southern, Jr., and others.

Jacksonville, Fla.—Experimental Farm.—Duval Farm & Land Co., recently reorganized to establish experimental farm in Duval county, elected Telfair Stockton, president; Robert Gamble, vice-president; J. D. Shaylor, secretary and treasurer; contemplates handling agricultural lands of Duval county in 5 and 10-acre tracts for intensive farming, and will operate from 10 to 20 acres as demonstration farm; office probably in Board of Trade Building, Jacksonville.

Jeanerette, La.—Planting.—Kilgore Planting Co. incorporated with \$40,000 capital stock; H. B. Hewes, president; C. A. McGowan, vice-president; Charles A. Polson, secretary; J. C. Ackers, treasurer; Leonard Lyon, manager.

Jonesboro, Ark.—Mercantile.—Osborne Bros. Grocery Co. incorporated with \$20,000 capital stock by W. A. Johnson, P. S. Osborne, Lee Olrod and others.

Keo, Ark.—Mercantile.—L. C. Owen & Co. incorporated with \$10,000 capital stock; J. D. Cobb, president; L. C. Owen, vice-president; J. W. Cobb, secretary; S. C. Cobb, treasurer.

Le Belle, Texas.—Farming, etc.—E. M. Prindle and A. B. Gregory, Whitehall, Ill., have, it is reported, purchased Jefferson County Rice Farm, adjoining Taylor's Bayou, near La Belle, consisting of 13,000 acres; will make improvements and begin cultivation of rice; will also farm and raise cattle and hogs.

Lexington, Ky.—Coffee Roasting.—Woolfolk-Gulley Coffee Co. (W. T. Woolfolk and W. M. Gulley), recently noted to install coffee-roasting plant, will erect three-story building 60x100 feet, to cost \$18,000; machinery ordered; daily capacity, 40 bags coffee.

Linden, Ala.—Mercantile.—Bailey-Adams Mercantile Co. incorporated with \$15,000 capital stock by J. I. Bailey, Howard Adams and Irving Adams.

Lissie, Texas.—Grain Elevator.—Lissie Elevator Co., recently reported incorporated with \$8000 capital stock, operates elevator with daily capacity of 1000 barrels rough rice.

Little Rock, Ark.—Publishing.—Review Publishing Co. will be incorporated to publish Review of Banking and Insurance.

Louisville, Ky.—Buckley Company incorporated with \$75,000 capital stock by Laura Buckley, Ray Buckley, J. Kendrick Johnson and W. T. Woolridge.

Louisville, Ky.—Tea, Coffee, etc.—Gem Coffee & Supply Co. incorporated with \$5000 capital stock by W. Wallace McDowell and A. Schlesinger.

Louisville, Ky.—Milk.—J. P. Gray Sanitary Milk Co. incorporated with \$25,000 capital stock by J. P. Gray, George D. Young, Chas. P. Miller and others.

Marshville, N. C., R. F. D. No. 1.—Lumber.—Marshville Lumber Co. incorporated with \$100,000 capital stock to deal in North Carolina pine lumber; B. F. Rankin, president; F. L. Goodson, vice-president; V. A. Ashcraft, secretary-treasurer. (Name incorrect in recent notice under "Lumber Manufacturing Plants.")

Marshville, N. C.—Hardware.—Union Hardware Co. incorporated with \$125,000 capital stock by J. E. Bailey, J. W. Little and others.

McRaven, Miss.—Cotton.—Farmers' Warehouse Co., domicile, McRaven, Miss.; main office, Jackson, Miss., organized to conduct cotton business through warehouses, main-

taining selling agencies, etc.; G. R. Hightower, president; B. F. Ward, Jr., secretary; company to buy and erect warehouses in all parts of Mississippi.

Memphis, Tenn.—Land Improvement.—Industrial Land Co. incorporated with \$20,000 capital stock by R. Brinkley Snowden, R. A. Speed, Harry E. Bradford and others.

Memphis, Tenn.—Motor Cars.—Buick Motor Car Co., Flint, Mich., will, it is reported, establish salesrooms and repair plant in Memphis; Louis Woods, local representative.

Memphis, Tenn.—Printing.—H. W. Dixon Company, H. W. Dixon, president, 118 North Front St., will repair four-story brick building recently reported burned; cost of repairs, \$500; will install photo-engraving, electrotype and printing machinery; architect not engaged.

Mercedes, Texas.—Machinery and Hardware.—Rio Grande Hardware & Machinery Co. incorporated with \$15,000 capital stock by G. K. Watson and Hugh Hamilton, both of Pennsylvania.

Muskogee, Okla.—Land Improvement.—Kentucky Realty Co. incorporated with \$15,000 capital stock by W. L. Tull, Franklin Garland and Clark J. Tisdell.

Muskogee, Okla.—Schmitt, Bassler & Co. incorporated with \$15,000 capital stock; J. S. Schmitt, president; George Bassler, secretary and treasurer; John G. Lieber, vice-president.

Nashville, Tenn.—Grain.—Midland Grain Co. incorporated with \$5000 capital stock by John H. Bell, W. Murray Hogan, P. W. Duke and others.

Nashville, Tenn.—Grain.—Midland Grain Co. incorporated with \$5000 capital stock by W. M. Hogan, J. H. Bell, G. W. Pyle and others.

Newbern, N. C.—Land Improvement.—Newbern Real Estate Co. incorporated with \$15,000 capital stock by M. M. Marks, Joseph Gaskill and W. A. McIntosh.

Newbern, N. C.—Land Improvement.—Newbern Real Estate Co. incorporated with \$15,000 capital stock by M. M. Marks, Joseph Gaskill and J. A. McIntosh.

New Orleans, La.—Land Improvements.—Myrtledale Land Co., Ltd., previously reported organized, has incorporated with \$40,000 capital stock; George C. McDerby, president; Clarence F. Low, vice-president and treasurer; James G. Middleton, secretary.

New Orleans, La.—Land Improvements.—Abita Land & Improvement Co. incorporated with \$40,000 capital stock by Walter Parker, Fred J. Eldridge, Frank S. Walshe and others.

New Orleans, La.—Rifles.—Febiger Arms Co. incorporated with \$60,000 capital stock; J. C. Febiger, president; H. B. Febiger, vice-president; M. B. Griffin, secretary; will hold patent rights relating to automatic 22-caliber rifles to be manufactured in Northern cities.

New Orleans, La.—Mercantile.—Audubon Grocery & Wine Co., Ltd., incorporated with \$30,000 capital stock; M. A. Foute, president; Hal M. David, vice-president; George F. Seeman, secretary and treasurer.

New Orleans, La.—Land Improvement.—Abita Land & Improvement Co. incorporated with \$40,000 capital stock by Walter Parker, Fred J. Eldridge, Frank S. Walshe and others.

New Orleans, La.—Rice.—Producers' Rice Co. incorporated with \$3000 capital stock; Joseph J. Ritzyk, president; W. L. Gleason, vice-president; George DeArmas, secretary; J. W. Gleason, Jr., treasurer.

New Orleans, La.—Real Estate, etc.—Maison Blanche, Ltd., corporation will be dissolved and two separate corporations formed: Maison Blanche Realty Co., capitalized at \$2,500,000, to own and operate present building and real-estate holdings of Maison Blanche, Ltd., and Maison Blanche Company, capital \$1,450,000, to purchase and operate mercantile business of Maison Blanche, Ltd.; I. S. West, R. L. Emery and Leon E. Schwartz, committee of stockholders; J. H. Fulton, S. J. Schwartz and Mark Isaacs, committee of directors.

New Orleans, La.—Crescent City Slaughterhouse Co., Henry Daboval, general manager, will erect additions to plant.

Northport, Ala.—Mercantile.—J. H. Anders Mercantile Co. incorporated with \$15,000 capital stock by J. H. Anders, Jr., G. H. Maxwell, L. P. Anders and others.

Oklahoma City, Okla.—Electrical Supplies. Dunbar Electrical Supply Co. has increased capital stock from \$10,000 to \$15,000.

Oklahoma City, Okla.—Walker-Nix Company incorporated with \$5000 capital stock by C. P. Walker, Ed Nix and B. B. Dale.

Oklahoma City, Okla.—Fire Department.—

City contemplates voting on issuance of \$100,000 of bonds for fire equipment; Henry M. Scales, Mayor.

Olney, Texas.—Development.—Citizens' Townsite Co. incorporated with \$5000 capital stock by J. E. Harrell, W. F. Hutchinson and T. H. Camp.

Pittsburg, Texas.—Hardware.—Holman Hardware & Furniture Co. incorporated with \$10,000 capital stock by J. M. Holman, A. P. Holman and G. P. Hill.

Quanah, Texas.—Townsite.—Quanah Townsite Co., recently reported incorporated, has organized with \$40,000 capital stock; R. L. Collins, president; J. A. Clark, vice-president; A. B. Axtell, secretary and treasurer; company owns title to 1507 acres of land on proposed railroad between Quanah and Paducah, and will develop townsite.

Raymondville, Texas.—Lacoma Mercantile Co. incorporated with \$20,000 capital stock by W. T. Sprague, S. L. Gill and C. M. Kennedy.

Raymondville, Texas.—Mercantile.—Lacoma Mercantile Co. incorporated with \$20,000 capital stock by W. F. Sprague, S. L. Gill and C. M. Kennedy.

Rockbridge Alum Springs, Va.—Springs Resort.—Rockbridge Alum Springs, Inc., will make extensive improvements to property recently noted purchased; will install lighting plant; J. W. Bell, general manager. (See Machinery Wanted.)

Spartanburg, S. C.—Fire-alarm System.—City awarded contract to Gamewell Fire & Police Alarm Co., Cincinnati, Ohio, for installation of 30-box fire-alarm system in Spartanburg; cost \$6500.

Spring Hope, N. C.—Grocery.—Spring Hope Grocery Co. incorporated with \$10,000 capital stock by J. D. Farrier, C. L. Morgan and others.

St. Louis, Mo.—Paints, Oil, etc.—Heuser Mercantile Oil & Supply Co. incorporated with \$50,000 capital stock by Frederick Nobbe, Joseph A. Buse, Peter Hahn and others.

St. Louis, Mo.—Dairy.—Parker's Dairy Co. incorporated with \$6000 capital stock by H. C. Parker and H. Parker.

Tampa, Fla.—Building.—Home Building Co. organized with \$50,000 capital stock; W. B. Gray, president and general manager; John Savarese, vice-president; C. E. Ball, secretary; L. L. Buchanan, treasurer; company subsidiary to Mutual Realty & Investment Co.; will purchase lots in holdings of Mutual and erect dwellings.

Victoria, Texas.—Construction.—Port O'Connor Construction Co. incorporated with \$10,000 capital stock by W. I. Allen, B. W. Fly, George B. Hugh and J. K. Hexter.

Washington, D. C.—National Electric Signalling Co., Pittsburgh, Pa., is lowest bidder at \$182,000 for installation of wireless tower and apparatus for Government at Washington for transmitting messages to ships at sea at all times and seasons to radius of 3000 miles in any navigable direction from Washington.

Washington, N. C.—Grocery.—Pamlico Grocery Co. incorporated with \$50,000 capital stock by J. M. Waters, L. P. Harris and J. V. Allgood.

MISCELLANEOUS MANUFACTURING PLANTS

Abbeville, La.—Ice-cream.—Egwanulti Manufacturing Co., R. Dozier, president, Box 504, recently noted to increase capital stock, make additions, etc., will erect three-story building, 29x80 feet, to cost \$5000 complete; plans by Mr. Dozier; construction, hollow wall, cement plaster on trussed metal lath on 2-inch by 6-inch frame; additional machinery to be installed; capacity of plant, 200 gallons ice-cream daily. (See "Machinery Wanted.")

Abilene, Texas.—Gas Plant.—Abilene Gaslight, Fuel & Power Co., W. A. Minter, Jr., president, recently noted to install water-gas plant, has placed order for equipment; daily capacity artificial gas, 125,000 cubic feet; will erect building 54x62 feet, of ordinary brick and concrete blocks, to cost \$4500; W. H. Harrison, Jr., engineer in charge.

Anderson, S. C.—Gas Plant.—W. H. Harrison, Jr., Abilene, Texas, has been granted extension of franchise for construction of gas plant in Anderson.

Ashdown, Ark.—Novelties.—D. L. Perkins of Perkins-Dulaney Land Co. is interested in establishment of plant in Ashdown to manufacture novelties.

Atlanta, Ga.—Automobiles.—White Star Automobile Co., recently reported incorporated with \$150,000 capital stock, will manufacture motor vehicles; to use plant of Atlanta Buggy Co., already equipped; no further machinery needed; Clarence Houston,

president and treasurer; Frank J. Long, vice-president; Harry W. Anderson, general manager; Hugh R. Fischer, secretary; H. B. Mott, superintendent.

Augusta, Ga.—Shirts, etc.—Black-Christie Manufacturing Co. incorporated with \$12,000 capital stock by Edward J. Black and Robert V. Christie.

Baton Rouge, La.—Boats.—Progressive Manufacturing Co., Torrington, Conn., will not establish plant to manufacture motor boats, etc. (Recently incorrectly reported.)

Belton, Texas.—George H. McFadden & Bro., Philadelphia, Pa., reported as having purchased machinery and to erect \$40,000 cotton compress at Belton to replace burned plant. (Previously mentioned.)

Belton, Texas.—Creamery.—Donnell Creamery Co., recently reported incorporated, will continue operation of creamery; capacity, 500 pounds butter one churning; J. R. Donnell, president and manager; Earl R. Donnell, secretary and treasurer.

Birmingham, Ala.—Syrups.—National Dope Co. incorporated with \$15,000 capital stock; P. L. Houppert, president; E. J. Smiley, secretary; E. L. Schillinger, vice-president; A. E. Campbell, treasurer; will manufacture syrups for soda-water drinks.

Coriscana, Texas.—Paint.—Coriscana Paint Co. incorporated with \$5000 capital stock by P. W. Huber and J. C. Huber.

Decatur, Ala.—Money-order Cabinets.—Henderson Money Order Cabinet Co. incorporated with \$5000 capital stock; W. B. Henderson, president; J. C. Eyster, vice-president; E. P. Jennings, secretary and treasurer.

De Witt, Ark.—Rice Mill.—Company organized by C. P. Ball, L. A. Black, E. P. Gipsen and others to establish rice mill; cost about \$30,500.

Dothan, Ala.—Mattresses.—Dothan Mattress & Manufacturing Co., recently reported incorporated, will operate plant with capacity of 60 to 75 mattresses daily; no machinery needed; C. J. Faulk, president; Robert Boyd, secretary; J. M. Merritt, general manager.

Eldorado, Ark.—Ice Cream and Candy.—S. T. Williams, Ida, Okla., contemplates establishment of ice-cream and candy factory at Eldorado.

El Reno, Okla.—Drugs.—Miller-Jones Drug Co. incorporated with \$15,000 capital stock by C. R. Miller, M. Alice Miller and Leroy D. Jones.

Enterprise, Ala.—Drugs.—City Drug Co. incorporated with \$5000 capital stock by W. G. Falkes, W. M. Jenkins and W. W. Russell.

Fort Smith, Ark.—Petroleum Refinery.—Chas. T. Madison, Muskogee, Okla., is interested in plans of a company to establish petroleum refinery and wax plant at Fort Smith with capacity of from 750 to 1000 barrels daily; will manufacture various by-products of petroleum.

Fulton, Mo.—Clothing.—Star Clothing Manufacturing Co., Jas. Hinchin, president, Jefferson City, Mo., recently noted to establish clothing factory, will erect building 60x120 feet; mill construction; cost \$12,000; M. F. Bell, architect and engineer; cost of machinery, \$3500; will manufacture work clothing.

Georgia.—Fertilizer.—Ducktown Copper Co., Ducktown, Tenn., will construct fertilizer plant on Louisville & Nashville Railroad in North Georgia.

Greensboro, N. C.—Gas Plant.—W. N. Coler & Co., bankers, 43 Cedar St., New York, reported purchasers of Greensboro Electric Co., will, it is stated, erect new gas plant to cost \$100,000 and extend gas mains. (See "Electric-light and Power Plants.")

Houston, Texas.—Ice Cream.—Jones & Cogswell Ice Cream Co. incorporated with \$5000 capital stock by J. Morrison Jones, Sterling P. Cogswell and S. M. Richardson.

Houston, Texas.—Fireproof Paint.—S. & S. Fireproof Paint Co. has increased capital stock from \$200,000 to \$300,000 and changed main office from San Antonio to Houston.

Huntsville, Ala.—Fertilizer.—Company is being organized by M. B. Neece to establish fertilizer factory.

Jackson, Ky.—Jackson Manufacturing Co. incorporated with \$30,000 capital stock by Dave Jackson, W. S. Jackson and R. M. Jackson.

Jennings, La.—Gas.—Southern Heat & Light Co., F. E. Bliss, president, noted incorporated in December (under "Electric-light and Power Plants") with \$100,000 capital stock, will erect metal building 42x50 feet at cost of \$2000; cost of gas machinery, \$40,000; capacity of plant, 200,000 cubic feet daily; all contracts closed.

Jennings, La.—Gas.—Southern Heat & Light Co., has, it is reported, awarded contract for

erection of plant for manufacturing gas from crude oil for heating and lighting and for laying about eight miles of mains; George S. Forrest, Manager and Engineer. (Noted in December.)

Kansas City, Mo.—Cloaks.—Spaulding Cloak Co. incorporated with \$10,000 capital stock by Stegmund Harzfeld, L. A. Gladish and J. A. Harzfeld.

Kentucky.—Lead-ore Products.—Mutual Mining Co., Kissinger, Ky., is seeking site of 20 to 40 acres on Cincinnati Southern Railroad for location of plant.

Knoxville, Tenn.—Specialties.—Fulton Company awarded contract to J. M. Dunn for erection of addition to plant; new structure to be size of present building; will double capacity.

Knoxville, Tenn.—Clothes Rack.—Star Clothes Rack Co. (H. L. Smith), 710 Empire Bldg., care of H. T. Hackney Coal Co., will manufacture clothes rack; contemplates placing order for manufacture. (See "Machinery Wanted.")

Lockhart, Texas.—Cigars.—Hugo Schmidt, New Braunfels, Texas, will establish cigar factory at Lockhart.

Lake City, Fla.—Medicine.—Southern Medicine Co. incorporated with \$3000 capital stock; A. B. Small, president; H. A. Wilson, vice-president; Braxton Small, secretary; M. Y. Plympton, treasurer.

Luling, Texas.—Incubators.—A. P. Verser, Fortress, Texas, proposes establishment of plant at Luling for manufacturing incubators.

Lynchburg, Va.—Pulp Mill.—C. L. Logan, Big Island, Va., contemplates erecting pulp mill in Lynchburg.

Macon, Ga.—Tannery.—Harry M. King, Brunswick, Ga., contemplates erection of tannery at Macon.

Merkel, Texas.—Drugs.—Rust & McCauley Drug Co. incorporated with \$10,000 capital stock by E. M. Rust, C. M. McCauley and L. Brown.

Miami, Fla.—Castor Oil.—Biscayne Castor Oil Co. incorporated with \$30,000 capital stock by C. J. Rose, James F. Wodworth, K. M. Large and others; will extract oil and manufacture products of castor bean.

Mission, Texas.—Sugar Mill.—Conway & Holt, S. A. McHenry, Albert Sammons and E. V. Peterson of Mission; Thomas Burton of Norton, Kans.; Thomas McBride and Williams Mosedale of Elgin, Ill., and associates are reported as to build sugar mill at cost of \$300,000; to begin construction soon and complete mill for cane crop of 1910; Conway & Holt preparing to plant cane in 125 acres on La Lomita Canal in order to secure seed cane for planting 900 acres.

Mobile, Ala.—Kinbrough Manufacturing Co. incorporated with \$12,000 capital stock by F. J. Kinbrough, M. P. Northrop, W. R. Cox and H. A. Holmes.

Montgomery, Ala.—Fertilizers.—Charles Ellis of Brewton, Ala., planning organization of \$200,000 stock company to build fertilizer factory with annual output of 15,000 tons and cotton-oil mill of 80 tons daily capacity.

New Orleans, La.—Bakery.—Royer Baking Co. incorporated by E. J. Royer, W. J. Hartmann and Lee Bowie.

Oklahoma City, Okla.—Bottling.—Oklahoma Cola Co. incorporated with \$51,000 capital stock by J. A. Franklin, G. W. Plumlee, Geo. H. Childs and others.

Orange, Texas.—Paper Mill.—Yellow Pine Paper Mill Co. (capital stock, \$200,000) will triple capacity of mill, increasing capacity to 30 tons daily and investment to \$500,000; will install additional machinery as follows: Four digesters, evaporators, rotary furnaces, elevator and conveying machinery, 700-horsepower engine, other smaller engines, 1000-horsepower boiler, etc.; additional equipment to be in position by July 1; product, wrapping paper from pine mill waste; E. G. Goodall, manager.

Petersburg, Va.—Dress Goods.—Fraser-Binford Company incorporated with \$10,000 capital stock; W. F. Fraser, president and treasurer; S. E. Binford, secretary.

Port Lavaca, Texas.—Brooms.—T. F. Hill will establish plant for manufacturing brooms; will install machinery in suitable building; to be known as Port Lavaca Broom Co.

Quincy, Fla.—Stump-Pullers, etc.—United States Steam Stump-Pulling & Manufacturing Co. intends to incorporate and manufacture stump-pulling machinery, contract for road and canal construction, etc.; R. L. Reasley to be president.

Richmond, Va.—Paper Boxes.—Wilson Paper Box Co. incorporated with \$25,000 capital stock; A. H. Drewry, president and treas-

urer; W. H. Mattox, vice-president; E. L. Harman, secretary.

Sistersville, W. Va.—Glass.—Independent Glass Co. incorporated with \$10,000 capital stock by John B. Schog, Louis Van Dennis, Alexander Mooney and others, all of Morgantown, W. Va.

Spencer, N. C.—Publishing.—Spencer Publishing & Printing Co. incorporated with J. D. Dorsett, president; W. H. Burton, vice-president; L. Scott Allen, secretary and treasurer.

Staunton, Va.—Dentifrice.—Prophytol Dentifrice Co. has increased capital stock from \$50,000 to \$100,000.

Statesville, N. C.—Asbestos Products.—Chas. Lambert and others interested in organization of company to manufacture asbestos products; Mr. Lambert recently noted to have purchased 50 acres asbestos land. (See "Machinery Wanted.")

St. Louis, Mo.—Folding Bed.—Supreme Folding Bed Co. incorporated with \$5000 capital stock by Philip Roeder, Jr., Nicholas F. Brookings and Charles G. Gallee.

St. Louis, Mo.—Hats.—Metropolitan Hat Co. incorporated with \$10,000 capital stock by Henry Steiner, Samuel Cohen and Harry A. Frank.

St. Louis, Mo.—Peanuts.—Barnhart Mercantile Co. has purchased five buildings at Levee and Elm streets and will expend \$25,000 in remodeling into plant for cleaning, shelling and polishing peanuts.

St. Louis, Mo.—Dry-goods Novelties.—Baer Bros. Dry Goods Novelty Co. incorporated with \$10,000 capital stock by Edward Baer, Monte Baer and Sol Baer.

St. Louis, Mo.—Hair Goods.—F. De Donato Hair Emporium Co. incorporated with \$20,000 capital stock by Florian De Donato, A. R. Flarita and Florian De Donato, Jr.

St. Louis, Mo.—Asphalt.—El-Oso Asphalt Co., 709 Victoria Bldg., recently noted incorporated under "Miscellaneous Enterprises" with \$300,000 capital stock, will operate refinery of 50 tons daily capacity; equipment supplied; F. O. Blake, president; F. C. Blake, vice-president and manager.

St. Louis, Mo.—Atlas Manufacturing & Stamping Co. incorporated with \$50,000 capital stock by F. M. Wilcox, P. M. Wilcox and August Walz, Jr.

St. Louis, Mo.—Glass Windows, etc.—Missouri Wire & Roller Glass Co. incorporated with \$20,000 capital stock by James W. Allison, Anton Meyer and I. A. Stephenson.

St. Louis, Mo.—Hats.—Metropolitan Hat Co. incorporated with \$10,000 capital stock by Henry Steiner, Samuel Cohen and Harry Frank.

St. Louis, Mo.—Folding Boxes.—Superior Folding Box Co. incorporated with \$5000 capital stock by Philip Roeder, Jr., Nicholas F. Backus and Charles G. Gallee.

St. Louis, Mo.—Dry Plates.—Hammer Dry Plate Co. will erect addition and install additional machinery.

Strasburg, Va.—Lime.—Powhatan Lime Co. will enlarge plant; additional machinery will be installed.

Tyler, Texas.—Shirts, Overalls, etc.—Long-Hargrove Manufacturing Co. organized with \$10,000 capital stock to manufacture men's shirts, overalls and ladies' shirtwaists.

Union Springs, Ala.—Drugs.—Dean-Turnipseed Pharmacy Co. incorporated with \$12,000 capital stock by J. L. Dean, C. L. Turnipseed and T. J. Dean.

Valdosta, Ga.—Winn-Jones Shoe Co., recently noted interested in organization of \$35,000 company to establish shoe factory, has not perfected organization; it is proposed to erect brick factory building and equip for capacity of 1000 pairs of shoes daily.

Waurika, Okla.—Bottling.—M. Griffin O'Neil, Dallas, Texas, will establish bottling works in connection with ice and electric plant at Waurika. (See "Machinery Wanted.")

Weatherford, Texas.—Drugs.—Weatherford Drug Co. incorporated with \$8000 capital stock by W. M. Block, Fabian Bell and H. W. Kutman.

Wellsburg, W. Va.—Glass Plant.—Pierce Medicine Co., Buffalo, N. Y., contemplates establishing glass factory at Wellsburg.

Wichita Falls, Texas.—Ice-Cream.—Citizens' Dairy & Ice-Cream Co. incorporated with \$7000 capital stock by J. H. Burnett, H. B. Patterson and B. J. Bean.

RAILWAY SHOPS, TERMINALS, ROUNDHOUSES, ETC.

Bonham, Texas.—Texas & Pacific Railway, B. S. Wathen, chief engineer, Dallas, Texas, contemplates, it is reported, erection of roundhouse at Bonham.

Crowley, La.—Chicago, Rock Island & Pacific Railway, J. B. Berry, chief engineer, Chicago, Ill., will, it is reported, build roundhouse and repair shops at Crowley.

Dallas, Texas.—Chicago, Rock Island & Gulf Railway, J. W. Robins, general superintendent, Fort Worth, Texas, contemplates, it is reported, erecting freight terminals in Dallas.

Hamburg, Ark.—Arkansas, Louisiana & Gulf Railway, J. M. Parker, general manager, Monroe, La., is preparing, it is reported, to build roundhouse and shop at Hamburg.

ROAD AND STREET IMPROVEMENTS

Atlanta, Ga.—City will expend \$18,000 for street improvements; R. M. Clayton, City Engineer.

Baltimore, Md.—B. T. Fendall, City Engineer, has notified various city departments and public-service corporations to begin at once any work that might necessitate tearing up of streets included in paving list; laying of pipes, etc., to connect abutting property, before paving contracts are awarded; bids will be asked on various kinds of material; appropriation, \$200,000. About 20 streets will be paved during 1909, including Fulton avenue, from Baltimore street to Frederick avenue; Payson street, from Baltimore to Fayette street; Columbia avenue, from Gwynn's Falls to B. & O. R. R. on Putnam street; Lanvale street, from Eutaw place to Linden avenue, etc.; James H. Smith, president Commissioners for Opening Streets. (Previously mentioned.)

Baltimore, Md.—State Roads Commission will begin in spring improvement of roads under \$5,000,000 loan, asking for bids in almost all counties of Maryland and in Annex of Baltimore; routes for roads have been definitely located in all counties except Baltimore, Howard, Harford, Washington, Montgomery and Frederick; these will soon be decided; under provision of law, State has been authorized to issue \$500,000 of bonds in 1908 and \$1,000,000 for each succeeding year until loan is expended; about \$15,000 was expended last year, allowing commission nearly \$1,500,000 for 1909. Walter W. Crosby, chief engineer, State Geological Survey, Howard Bldg., J. H. U., Howard near Center St., or Gov. Austin L. Crothers, chairman of State Roads Commission, Union Trust Bldg., Baltimore, can give information.

Birmingham, Ala.—City opened bids February 3 for paving sidewalks; Maury Nicholson, City Engineer.

Charleston, W. Va.—City awarded contract to Atlantic Bitulithic Co., Mutual Bldg., Richmond, Va., for bitulithic street paving aggregating 64,000 square yards; total cost, \$151,996.90; company will not need bids on materials; W. A. Hogue, City Engineer, is in charge.

Chase City, Va.—Chase City District has had surveys made by State engineers for macadam roads leading from city; \$70,000 available; principal streets of city will be paved; P. St. J. Wilson, State Highway Commissioner, Richmond, Va.

Chattanooga, Tenn.—Board of Public Works, H. F. Van Dusen, chairman, held meeting February 2 to consider and adopt character of paving, curbing and sidewalks for paving district No. 116, comprising Cypress street, between 9th and 6th streets.

Easton, Md.—City is considering street improvements; estimated that cost will be \$10,000 per mile; bond issue proposed; Chas. W. Adams, Mayor.

Elkton, Md.—Cecil county will grade and macadamize Pleasant Hill road, Farmington-Greenhurst road, St. Augustine road and Cecilton road; bids to be opened February 10; W. H. Deshane, president County Commissioners. (See "Machinery Wanted.")

Galveston, Texas.—City contemplates issuing \$125,000 of bonds for grade-raising of certain streets and blocks. Address The Mayor.

Greenville, Tenn.—Greene county has appointed E. C. Huffaker, Chuckey, Tenn., as civil engineer for public roads to be graded and macadamized, and will proceed at once with engineering work; Greene County Court has authorized \$150,000 of bonds additional to \$150,000 previously authorized, with which it is expected that 200 miles of road can be completed.

Hamlin, Texas.—City has increased original contract with the Cement Sidewalk Co. for paving Union avenue from 3000 to 5000 feet; when this is completed work will begin on Jackson avenue; about 15,000 feet will be laid in residence portion of town under present contract.

Harrisonburg, La.—Catahoula Parish Po-

lice Jury, N. R. Cotton, president, Jonesville, La., will construct about four miles dirt road recently mentioned; appropriation, \$2000.

Honey Grove, Texas.—If election recently noted to be held February 25 for \$7000 of bonds is carried, city will expend that amount in construction of street crossings, storm sewers, etc.; contract probably awarded locally; S. H. Gardner, Mayor.

Humboldt, Tenn.—City awarded contract to Memphis contractor for grading and macadamizing three miles of streets; contract includes guttering and necessary bridges, but not sidewalks; \$30,000 of bonds have been voted; N. A. Senter, Mayor. (Recently mentioned.)

Huntsville, Ala.—City awarded contract to Mineral Rubber Asphalt Co. (probably of Huntsville) for paving West Clinton street with mineral rubber asphalt; City Council passed ordinance providing for issue of \$40,000 of bonds; R. E. Smith, Mayor. (Recently mentioned.)

Logan, W. Va.—Contract has been awarded for street paving; Board of Control suggested use of Indiana limestone instead of concrete curbs and gutters; Charles Avis, Recorder. (Previously mentioned.)

Memphis, Tenn.—Legislative Council has approved proposed \$1,000,000 bond issue for sewer, street and bridge purposes. Address The Mayor.

Nashville, Tenn.—J. A. Webb of Nashville is lowest bidder at \$3,386.50 for grading, bedding and macadamizing Belmont avenue distance of about 2600 feet; water mains are being laid.

New Orleans, La.—City awarded following contracts for street paving: C. Hyland, Magazine street, from Julia to St. Joseph, with square block; W. H. Douglas, Calliope street, from St. Charles avenue to Rampart street, with small granite block; W. J. Commerford, Calliope street, from Rampart to Magnolia, with small granite block; Southern Bitulithic Co., Nashville, Tenn., Clio street, from Prytanla to Dryades; Etta Contracting Co., Pine street, from St. Charles avenue to Magnolia street, with chert. Ordinances were also adopted for paving Jackson avenue, repaving Frenchmen street, repaving Calliope street, from Camp to Annunciation street; W. J. Hardee, City Engineer. (Street improvements recently mentioned.)

Norton, Va.—City contemplates voting on issuance of \$50,000 of bonds for street and sidewalk improvements, construction of sewer system, etc. Address The Mayor.

Oklahoma City, Texas.—City contemplates voting on issuance of \$400,000 of bonds for parks and boulevards; Henry M. Scales, Mayor.

Opelousas, La.—City will readvertise for bids to be opened about February 15 for construction of 35,000 square feet of cement sidewalks and 7000 linear feet brick curbing; estimated cost, \$10,000; M. Halphen, Mayor. (Recently mentioned.)

Palatka, Fla.—City has \$30,000 available for street paving during 1909. E. S. Crill, chairman Board of Trustees, may be addressed for information relative to street paving to cost \$6000, recently mentioned; bids not yet published.

Palestine, Texas.—Anderson county is considering issuance of \$500,000 of bonds for road improvements. Address County Commissioners.

Pittsboro, N. C.—City is considering issuance of \$5000 of bonds for street improvements. Address The Mayor.

Portsmouth, Va.—Norfolk county, through its Permanent Road Improvement Commission, is preparing to build macadam road from Norfolk to Great Bridge; work will be in accordance with specifications approved by P. St. Julian Wilson, State Highway Commissioner, Richmond, Va.; bids will be received by the commission until March 1; Alva H. Martin, chairman. (See "Machinery Wanted.")

Richmond, Va.—Street Committee has asked appropriation of \$2,747,486.28 for street and sewer work, of which \$1,744,288.09 is for use in city and remainder in annexed territory; Charles E. Bolling, City Engineer.

Rohrersville, Md.—Rohrersville Improvement Co. incorporated with \$3000 capital stock by Dr. C. D. Baker, H. C. Hightman and S. C. Mullendore; has taken over Gapland road.

Rome, Ga.—Floyd county is considering issuance of \$200,000 of bonds for road improvements. Address County Commissioners.

Tampa, Fla.—Tampa Bay Land Co. awarded contract to Cook & Keller of Tampa for two miles of paving at Palma Cela Park; paving to be of shell with 15-foot roadbed.

SEWER CONSTRUCTION

Anadarko, Okla.—City has voted \$7000 of bonds for sewer extension. Address The Mayor.

Atlanta, Ga.—City has changed amount of bond issue for sewer construction from \$1,000,000, as recently stated, to \$700,000; date of election has also been changed to March 29; R. M. Clayton, City Engineer.

Bartlesville, Okla.—City will expend about \$40,000 in construction of sewers; W. H. Aspinwall of Bartlesville is engineer.

Birmingham, Ala.—City opened bids February 3 for constructing storm-sewer mains and branches thereto; also sanitary sewer, and for paving sidewalks; Maury Nicholson, City Engineer.

Haskell, Texas.—City invites bids until February 15 for purchase of all material necessary in construction of system of sewers and water-works, to include standard vitrified salt-glazed sewer tile and fittings, manholes, frames and covers, etc.; \$7000 sewer bond issue recently reported voted; O'Neil Engineering Co., M. Griffin O'Neil, president, Dallas, Texas, engineer in charge. (See "Machinery Wanted.")

Ita Bena, Miss.—City will construct sewer system; bids to be opened February 15; Xavier A. Kramer, consulting engineer, Magnolia, Miss. (See "Machinery Wanted.")

Memphis, Tenn.—Legislative Council has approved proposed bond issue of \$1,000,000 for street, bridge and sewer purposes. Address The Mayor.

Meridian, Miss.—City will soon award contract for construction of eight street sewers. Address The Mayor.

Norton, Va.—City contemplates voting on issuance of \$50,000 of bonds to construct sewer system, improve streets and sidewalks, etc. Address The Mayor.

Oklahoma City, Okla.—City contemplates voting on issuance of \$200,000 of bonds for sewer construction; Henry M. Scales, Mayor.

Paducah, Ky.—Bids opened February 2 for construction of sewer along line of Bradshaw Creek from Broadway to Jefferson street; L. A. Washington, City Engineer.

Park Station Knoxville, Tenn.—L. O'Connor of Knoxville has contract at \$14,388.25 for construction of sewer system, comprising 27,000 linear feet; Eighth District is omitted; W. C. Crozer, City Engineer. (Recently mentioned.)

Richmond, Va.—City Council is considering issuance of from \$500,000 to \$1,000,000 of bonds for sewer construction; to be included in appropriation of \$2,747,486.28 for street and sewer work asked for by Street Committee; Charles E. Bolling, City Engineer.

Sanford, N. C.—City is considering election for voting on issuance of \$25,000 of bonds for constructing sewer system. Address The Mayor.

TELEPHONE SYSTEMS

Cache, Okla.—Wichita Telephone Co. incorporated with \$8000 capital stock by W. K. Miller, W. E. Leekle and C. E. Hank.

Cooleemee, N. C.—Cooleemee Telephone Co. incorporated with \$10,000 capital stock by J. M. Ledford, J. A. J. Rice and others.

Dothan, Ala.—Company organized with C. L. Jackson president, J. D. Holton secretary, C. F. Gilstrap treasurer, to construct rural telephone system from Dothan to Hodgesville, Ala.

Farmington, Ky.—Farmington Telephone Co. incorporated with \$5000 capital stock by J. C. Skelton, J. J. Trumbo and D. C. Turner.

Houston, Texas.—Houston Home Telephone Co. will issue \$1,000,000 of bonds for erection of building and installation of automatic telephone system, to cost not less than \$750,000.

Houston, Texas.—Independent Telephone Co. awarded contract to Jones & Winter Construction Co., Chicago, Ill., for erection of office and exchange building; fireproof; 20,000 square feet floor space; switching capacity to take care of 10,000 telephones for immediate installation, with ultimate capacity of 35,000 lines; cost about \$1,500,000.

Lynnville, Ky.—Lynnville Telephone Co. incorporated with \$4000 capital stock by B. B. Pryor, Henry Conner and C. M. Richardson.

Meridian, Miss.—Cumberland Telephone Co. will make improvements to telephone system.

Mizpah, N. C.—Quaker Gap Telephone Co., recently reported incorporated by J. W. Slate and others, will establish telephone system. (See "Machinery Wanted.")

Norfolk, Va.—Southern Bell Telephone & Telegraph Co., main office Atlanta, Ga., will erect new building in Norfolk to cost about \$17,000.

Pilot Oak, Ky.—Pilot Oak Telephone Co. incorporated by J. A. Shelby, I. T. Howard and M. H. Weems.

Port Lavaca, Texas.—Port Lavaca Telephone Co. incorporated with \$20,000 capital stock by W. C. Best, H. C. Inalls and Willett Wilson.

Rusk, Okla.—Rusk Telephone Co. incorporated with \$5000 capital stock by J. A. Carver, W. T. Ruby, G. W. Rankin and others.

Sedalia, Ky.—Sedalia Telephone Co. incorporated with \$5000 capital stock by A. K. Jones, R. F. Jones and G. G. Carman.

Woodward, Okla.—Pleasant Hill Farmers' Mutual Telephone Co. incorporated by Geo. W. Tannahill and Flay Tibbets, both of Curtis, Okla.

TEXTILE MILLS

Austin, Texas.—Sacks and Twine.—Legislative committee has reported favorably on bill to appropriate \$150,000 for establishing bagging, sack and twine mill in State Penitentiary. Thomas M. Campbell, Governor, can probably give information.

Charlotte, N. C.—Cotton Yarns.—Highland Park Manufacturing Co. has decided not to build proposed coarse-yarn mill lately mentioned.

Concord, N. C.—Cotton Cloth.—Locke Cotton Mills Co. will rebuild mill No. 4 (formerly Odell), but telegraphs the Manufacturers' Record it is not prepared to state particulars now; reports say 50,000 spindles will be installed.

Duke, N. C.—Gray Goods.—Erwin Cotton Mills Co., West Durham, N. C., has decided to build mill lately mentioned; will install 50,000 spindles and accompany looms (about 1500) for manufacturing converters goods and wide sheetings; F. P. Sheldon & Sons, Providence, R. I., engineers in charge and instructed to prepare plans for building; company will invite bids for construction; not decided whether to locate at West Durham or at Duke; no other details determined; probably over \$1,000,000 will be expended.

Easley, S. C.—Sheeting.—Easley Cotton Mill plans to build addition; contemplates 25,000 spindles and 600 looms; Jos. E. Sirrine, Greenville, S. C., will be engineer in charge; cost of plant probably \$500,000; electric power; present equipment, 37,744 spindles and 1020 looms. J. M. Geer, company's president, telegraphs the Manufacturers' Record final decision not reached, but will probably build.

Forsyth, Ga.—Cotton Yarns.—Upson Manufacturing Co. of Thomaston, Ga., will build mill at Forsyth; will erect buildings and install machinery for manufacturing cotton yarns; probably 3500 ring spindles.

Greenville, S. C.—Print Cloth.—Woodside Cotton Mills will add 25,000 spindles and 700 looms; cost probably \$500,000; present equipment, 45,000 ring spindles and 1100 broad looms, producing print cloth; machinery and supplies have been purchased and practically all contracts awarded.

Hawkinsville, Ga.—Cotton Cloth.—Southern Cotton Mills reported as to add 5000 spindles.

Hendersonville, N. C.—Cotton Goods.—D. D. Little, Spartanburg, S. C.; Carroll Baldwin and S. J. Hallyburton, New York city, have submitted proposition for organization of cotton-mill company lately mentioned; offer to subscribe \$200,000 if \$75,000 is subscribed in Hendersonville; W. A. Smith, chairman of local committee, to solicit subscriptions.

Jonesville, S. C.—Hosiery.—Jonesville Manufacturing Co. reported as to begin reconstruction of hosiery mill burned last August; mill had 250 knitting machines, etc.

Monroe, N. C.—Cotton Yarns.—Icemoree Cotton Mills Co. reported as contemplating erection of another mill; present equipment 5000 spindles.

Norfolk, Va.—Silk Throwing.—Wm. H. Ashley Silk Co. of Hackettstown, N. J., will, it is reported, build branch silk-throwing mill at or near Norfolk.

Rockford, Tenn.—Cotton Yarns.—Rockford Cotton Mills, Ernest Koella, manager, 2326 Highland Ave., Knoxville, Tenn., will rebuild plant lately reported burned at loss of \$25,000; will also rebuild plant furnishing electricity to light mill and town.

Salisbury, N. C.—Sheetings.—Kessler Manufacturing Co. will build addition two stories high, 80x120 feet, and install additional machinery; reported as to remove 12,000 spindles from present mill to new building, besides buying 3000 to 6000 new spindles; old mill to be used for weaving only.

Slocumb, Ala.—Cotton Goods.—A. C. Kelley has not completed arrangements to organ-

ize cotton-mill company previously reported; \$40,000 has been subscribed.

St. Louis, Mo.—Waterproof Cloth.—Ferguson Waterproof Co. will not rebuild its burned Paducah (Ky.) plant; has secured two-story 100x150-foot building at 2116 South 2d street, St. Louis, and installed machinery; daily output 10 dozen waterproof coats.

Suffolk, Va.—Silk Goods.—Jno. B. Pinner, Mayor, is corresponding with silk manufacturers who contemplate building mill.

Summerville, Ga.—Print Cloth.—Z. T. McKinney, Greenville, S. C., and E. W. Sturdivant, Summerville, reported as having secured subscriptions for \$150,000 toward proposed \$200,000 company recently mentioned; contemplate erection of brick or reinforced concrete structures to be equipped with 10,000 spindles and complement of looms (about 300) for manufacturing print cloth.

Wadesboro, N. C.—Cotton Yarns.—Wadesboro Cotton Mills reported as to add 1000 spindles and accompanying machinery.

Woodruff, S. C.—Print Cloth.—Woodruff Cotton Mills reported as to build addition; now operating 37,000 ring spindles and 810 broad looms.

WATER-WORKS

Anadarko, Okla.—City has voted \$74,000 of water-works bonds. Address The Mayor.

Atlanta, Ga.—City will vote March 29 (instead of April 7, as lately stated) on issuance of \$500,000 of water-works bonds; R. M. Clayton, City Engineer.

Baltimore, Md.—J. Barry Mahool, Mayor, and Fire Board have virtually approved plans for fire-service pipe line through business section, but found that appropriation of \$465,000 out of \$1,000,000 fire loan would not be sufficient; entire system estimated to cost \$800,000; decided to refer plan to D. B. Banks, 203-205 Maryland Savings Bank Bldg., engineer in charge of construction, who prepared same, and George W. Horton, chief engineer Board of Fire Commissioners, so that new plans can be made embracing most important sections of city and which can be constructed within appropriation; first sections, to be part of general system, will be constructed in localities where greatest danger from fire exists, and later it is proposed to secure necessary additional appropriation from Board of Estimates; before plans are finally adopted they will be approved by expert engineer. It is probable Board will appoint either John Ripley Freeman, Providence, R. I., or Frederick Pike Stearns, Boston, Mass., engineers to devise plans for expenditure of \$500,000 water loan. (Previously mentioned.)

Birmingham, Ala.—Birmingham Water-works Co. will begin at once construction of proposed standpipe on top of Red Mountain to furnish water to South Highlands.

Charleston, Miss.—City Council is preparing to issue \$20,000 of water-works bonds. Address The Mayor.

Colquitt, Ga.—City will soon vote on issuance of \$15,000 of bonds for extension of water-works and electric-light systems. Address The Mayor.

Coweta, Okla.—City has engaged Mr. Swanwick, engineer, Joplin, Mo., to prepare plans for water-works system.

De Queen, Ark.—City awarded contract to American Light & Water Co., Kansas City, Mo., at \$24,195 for construction of water-works; plant will include reservoir with capacity of 50,000 gallons to be erected near power-house, steel tower with tank 131 feet high, steam pump, motor pump and 21 fire plugs. (Recently mentioned.)

Elgin, Texas.—City has voted \$30,000 of bonds for construction of water-works. Address The Mayor.

Erwin, Tenn.—Erwin Water Co., recently reported incorporated with \$10,000 capital stock by A. R. Brown and others, will operate water-works previously constructed by A. R. Brown.

Fairmont, W. Va.—Hampshire Orchard Co., Wm. B. Corawell, president, recently noted to have begun construction of water-works system, may need supplies; H. C. Inskip, Romney, W. Va., manager. (See "Machinery Wanted.")

Forest City, N. C.—City contemplates constructing water-works; will petition Legislature for authority to issue \$25,000 of bonds. Address The Mayor.

Granger, Texas.—N. K. Smith of Granger Oil Mill will construct water-works; has purchased artesian well flowing about 450,000 gallons of water daily.

Haskell, Texas.—City will open bids February 15 for purchase of all material necessary in construction of system of water-works and sewers, which will include return tub-

lar boilers, duplex pumps, boiler-feed pumps, heaters, cast-iron pipe, etc.; O'Neill Engineering Co., M. Griffin O'Neill, president, Dallas, Texas, has prepared plans and will supervise construction; \$23,000 water bond issue recently reported voted. (See "Machinery Wanted.")

Huntsville, Ala.—Hutchens & Murdock (probably of Huntsville) have contract to lay water mains in Patton Addition, East Huntsville and fourth ward; four-inch piping will be laid; contract price, 65 cents per foot.

Itta Bena, Miss.—City will construct water-works; bids to be opened February 15; Xavier A. Kramer, Magnolia, Miss., is consulting engineer. (See "Machinery Wanted.")

Johnson City, Tenn.—City is considering issuance of about \$500,000 of bonds to secure adequate water supply. Address The Mayor.

Meridian, Miss.—W. F. Wilcox, general manager of Meridian Water-Works, prepared plans and specifications for reinforced concrete reservoir and 5,000,000-gallon pump mentioned last week; construction will be entirely under his supervision; Piedmont Construction Co., Atlanta, Ga., lowest bidder at \$11,335 for reservoir. (Recently mentioned.)

Oklahoma City, Okla.—City contemplates voting on issuance of \$150,000 of bonds for water mains; Henry M. Scales, Mayor.

Opeolous, La.—Board of Aldermen adopted report recommending issuance of \$35,000 of bonds for improvements to electric-light and water plants, and \$5000 for extension of water and light service. Address The Mayor.

Paintsville, Ky.—Harry A. Loche, 547 Drexel Bldg., Philadelphia, Pa., has purchased municipal franchise for water-works and electric-light plant; will begin construction in about four weeks; will issue bonds on the plants; City Council will assess taxes for paying city's contract for water and electric lights; population, over 2500.

Perry, Ga.—City is considering construction of water-works; J. H. Powers has made surveys.

Russellville, Ark.—Russellville Water & Light Co. will award contracts during coming spring and summer for equipment of water-works system, previously mentioned; expects plans and specifications will immediately follow completion of dam and power plant. A. Brewster, Pine Bluff, Ark., is president. (See "Electric-light and Power Plants.")

Seabree, Ky.—City will open bids February 15 for construction of complete system of water-works; one 60,000-gallon steel tank; small frame building to contain boiler, two pumps, etc.; distribution pipe-line system; G. W. Cavanah, Clerk. (Recently mentioned. (See "Machinery Wanted.")

Temple, Texas.—City will advertise for bids for material to be used in relocating water mains on certain business streets to be paved; estimated cost, \$15,000. (City recently mentioned to vote March 1 on issuance of \$50,000 of bonds for street paving.) Address The Mayor.

Urbanna, Va.—Water-works recently mentioned will be constructed by private parties or company; John D. Gressett, Urbanna, is interested.

WOODWORKING PLANTS

Alexandria, La.—Furniture.—L. M. Bourgeois will enlarge plant and install machinery for manufacturing household furniture.

Ashdown, Ark.—Handles.—D. L. Perkins of Perkins-Dulaney Land Co. is interested in establishment of handle factory in Ashdown.

Asheville, N. C.—Caskets.—National Casket Co., Oneida, N. Y., has not yet completed plans for establishment of plant, to include erection of large building on French Broad River near turn of North Main street; as contemplated, structure to be of reinforced concrete or brick.

Asheville, N. C.—Pins and Crossarms.—Marcus Erwin, Asheville, and others are interested in contemplated establishment of factory to manufacture pins and crossarms; also contemplate making handles, spokes, etc. (See "Machinery Wanted.")

Birmingham, Ala.—Car-door Equipment.—Bullard Car Door Equipment Co. incorporated with \$50,000 capital stock; R. G. Bullard, president; William Bullard, vice-president; R. M. Bullard, general manager; B. M. Bullard, secretary and treasurer.

Chattanooga, Tenn.—Coffin Factory.—Tennessee Coffin & Casket Co., Orange Grove, Chattanooga, will increase capital stock from \$75,000 to \$100,000; E. R. Betterton, manager.

Corbin, Ia.—Handles, etc.—Gardner Wood Coloring & Manufacturing Co. will double

capacity of plant, making output 20,000 handles daily; also proposes to install new machinery for manufacturing all parts of wood fixtures of buggies; probable that manufacture of oars will be added later.

Dermott, Ark.—Staves.—Schneider Stave Co., William Schneider, president, recently noted to rebuild stave factory, will erect semi-fireproof building 35x64 feet; cost \$3000; will install machinery to produce 40,000 staves daily; A. C. Wilson, manager.

Earle, Ark.—Staves, etc.—Earle Coopers Co. organized by Machen, Turner & Dunbar to establish coopers plant.

El Dorado, Ark.—Wagons.—Agree Wagon Works incorporated with \$75,000 capital stock; F. L. Agree, president; George S. Miles, vice-president; Will McWilliams, second vice-president; W. M. Bellott, secretary; M. W. Harvy, treasurer; will establish plant with capacity of 5000 wagons annually.

High Point, N. C.—Hubs, Handles, etc.—The Hub & Handle Co. incorporated with \$25,000 capital stock by D. O. Cecil, R. I. Cecil and others.

Houston, Texas.—General Woodworking.—Calhoun Woodworking Co. incorporated with \$25,000 capital stock by J. C. Calhoun, W. H. Goumer and W. L. Glauser.

Lake Charles, La.—Furniture.—Reliable Furniture Co. incorporated with \$30,000 capital stock; R. J. Boudreaux, president; W. E. Bland, vice-president; E. L. Rowe, secretary and treasurer.

Marion, N. C.—Furniture.—Catawba Furniture Co., recently reported incorporated with \$40,000 capital stock by T. F. Wrenn, E. J. House, E. P. Foy and others, will continue established plant of T. F. Wrenn.

Mobile, Ala.—Furniture.—Selfert-Gower Furniture Co. incorporated with \$30,000 capital stock by George Selfert, E. J. Gower and C. B. Hervey.

New Orleans, La.—Wagons.—Clifton Williams, Meridian, Miss., will establish wagon and sawmill supply factory at New Orleans.

Orange, Texas.—General Woodworking.—Pond Manufacturing Co. will enlarge plant; will double capacity and erect warehouse.

Pine Bluff, Ark.—Furniture.—Tedstrom Furniture Co. incorporated with \$25,000 capital stock; O. F. Tedstrom, president.

Savannah, Ga.—Boxes, Grates, etc.—Southern Box & Lumber Co. organized with \$150,000 capital stock by A. W. Morehouse, M. F. Meyer, both of Savannah; J. Wesley Brindell, New York, and others; will manufacture patented boxes and fruit and vegetable crates.

Stillwater, Okla.—Furniture.—Home Furniture Co. incorporated with \$10,000 capital stock by Samuel Smith, J. H. Potter and Mae Smith.

St. Louis, Mo.—Excelsior.—St. Louis Excelsior Co. incorporated with \$10,000 capital stock by Walter Sellee, Fred Sellee and H. W. Dregman.

Waco, Texas.—Box Factory.—E. E. Cammack contemplates adding box factory within few months to sawmill now under construction; may then incorporate. (See "Lumber-Manufacturing Plants" and "Machinery Wanted.")

Walnut Cove, N. C.—Furniture.—J. R. Lackey will erect furniture factory.

BURNED

Americus, Ga.—Mrs. Henry B. Johnson's dwelling; loss \$4500.

Athens, Tenn.—A. W. Prather's furniture factory; loss \$12,000.

Atlanta, Ga.—Lyceum Theater, owned by estate of John H. Means, leased by J. B. Thompson; building and lot valued at \$65,000.

Baltimore, Md.—Herbert R. Lanthicum's livery and transfer building at 216 West Conway street; loss about \$10,000.

Bison, Okla.—El Reno Mill & Elevator Co.'s elevator; loss \$25,000.

Bluemont, Va.—Bluemont Elevator Co.'s grain elevator, feed stores and building; loss \$15,000.

Braymer, Mo.—Postoffice, store owned by E. H. Cross, J. W. Jones' store, bank of Braymer damaged; loss \$30,000.

Butler Springs, Ala.—W. J. Jones' hotel; loss about \$10,000.

Canton, Miss.—Mrs. Mary Lutz's residence; loss \$10,000.

Carrabelle, Fla.—The City Hotel.

Carthage, Mo.—Stout-Parke Foundry and Machine Works.

Chilhowie, Va.—National Bank of Chilhowie; R. F. Young is president.

Corsicana, Texas.—Sun-Light Publishing Co.'s plant damaged; loss \$5000.

Churchland, Va. — Churchland Baptist Church; loss about \$15,000; Rev. W. W. Savage, pastor.

Delhi, La. — Catholic church. Address The Pastor.

Dublin, Ga. — Southland Lumber Co.'s veneering plant.

El Reno, Okla. — El Reno Mill & Elevator Co.'s elevator, offices and coal bins; loss \$8500.

Erwin, Tenn. — R. W. Gilbert's residence; loss \$12,000.

Flaton, Texas. — Frank Ziegelbauer's gin and electric-light plant; loss \$5500.

Fort Worth, Texas. — Southern Hotel, conducted by J. W. Stegall.

Gulftport, Miss. — J. T. Blackmar's residence, Mrs. I. I. Barber's residence; loss \$7500.

Hamlet, N. C. — Boyd Hotel; loss on building about \$15,000.

Honey Grove, Texas. — Fannin Milling Co.'s plant; loss about \$3500.

Honey Grove, Texas. — Fannin Milling Co.'s corn sheller; loss \$3500.

Kowalliga, P. O. Alexandria City, Ala. — Kowalliga Academic and Industrial Institute; loss \$15,000.

Lebanon, Tenn. — McDonald-Wooten-Lester Drug Co.'s building, loss \$4000; McClain Bros. Dry Goods Co.'s building, loss \$30,000.

Lynchburg, Va. — Water tank (10,000 gallons) on property of A. F. Thomas.

Martin, Miss. — McCaleb's Hotel, M. Gilston's four warehouses, W. A. Hannington's two store buildings; loss about \$60,000.

Middlesboro, Ky. — Plant and building of Virile Food Co.; loss \$3500.

Milton, Fla. — Waldorf Hotel; Santa Rosa Star building; First National Bank building; Chaffin State Bank; loss \$35,000.

Mobile, Ala. — Alabama Lumber Co.'s sawmill; loss \$75,000.

Moncure, N. C. — Chatham Lumber Co.'s sawmill, owned by P. J. and O. E. Seawell; loss about \$1000.

Montgomery, Ala. — M. D. Robard's store, W. C. Sanford's store, University Brotherhood's Hall, Byron Sanders Construction Co.'s steam shovel; loss \$20,000.

Mt. Pleasant, Texas. — John Garrett's residence, owned by L. D. Panther; loss about \$3000.

Mt. Pleasant, Texas. — S. F. McCauley's gin and mill; loss \$5000.

Nowata, Okla. — First National Bank, Pioneer Drug Store, courthouse.

Oak Cliff, Station A, Dallas, Texas. — J. B. Spellman's dwelling; loss \$4000.

Oklahoma City, Okla. — Oklahoma Publishing Co.'s newspaper plant, loss \$45,000; J. I. Case Co.'s warehouse, loss about \$100,000.

Olympia, Ga. — West Yellow Pine Co.'s dry-kilns and sheds; loss \$8000.

Orangeburg, S. C. — D. A. Sprinkle's planing mill, drykiln and lumber-yard; loss \$9000.

Roanoke, Va. — Gambrell & Davis' flour mills; loss about \$100,000.

Rusk, Texas. — Rusk Lumber Co.'s mill, electric-light plant, ice and crate plant; loss \$40,000.

Somerset, Ky. — W. D. Glover & Co.'s department store, loss \$30,000; Denny Bros.' store building, loss \$5000; Weddle & Parker's store building, loss \$15,000.

Star City, Ark. — Friendship Normal Academy; loss about \$4000.

Sumrall, Miss. — Postoffice, Sumrall Drug Co., Cumberland Telephone Exchange, J. E. Parker's law office, E. C. Hudson's office; loss \$40,000.

Sumterville, Fla. — Sumter county courthouse. Address County Commissioners.

Thomson, Ga. — Public school building; loss \$4000. Address The Mayor.

Union, S. C. — Union Pepsi-Cola Bottling Works.

Valdosta, Ga. — Mrs. L. M. Blitch's residence, building owned by Ousley & Co., B. Pearlman's dwelling, R. G. Starke's dwelling; loss \$20,000.

Weston, Ark. — Edgar Lumber Co.'s hotel, W. R. Elmore's residence; estimated loss \$10,000.

Willard, Texas. — Saturnino Luera's ranch-house; loss about \$7000.

BUILDING NOTES

APARTMENT-HOUSES

Atlanta, Ga. — Hampton Court Co., Wm. Hurd Hillyer, president and treasurer, 1113 Candler Bldg., will erect by day's work 230-

000 apartment-house recently mentioned; two stories; brick veneer; tile roof; hardwood; six apartments; ordinary Flemish bond exterior; steam heat; electric lighting; plans by Bruce & Everett, English-American Bldg., Atlanta.

Baltimore, Md. — Mrs. Virginia H. Halsey, 5 West Franklin St., will have plans prepared by John Freund, Jr., 210 East Lexington St., Baltimore, for converting residence at 1208 St. Paul street into apartment-house; addition will be erected in rear; improvements will include hot-water heating system, electric and gas lighting fixtures, dumbwaiters, tiled baths, gas ranges, etc.

Frederick, Md. — Casper E. Cline will remodel building purchased lately; storeroom, 100x25 feet, on ground floor; flats on second and third floors.

Houston, Texas. — J. E. McAshan awarded contract to Zinke & Timmerman of Houston for erection of proposed apartment-house; three stories; 12 apartments; estimated cost, \$25,000; plans by R. D. Steele of Houston.

Portsmouth, Va. — Rudolph & Wallace are having plans prepared for store and apartment-house; three stories; brick; cost \$6000.

Washington, D. C. — Bates Warren, 416 5th St. N. W., purchased site 125x175 feet for about \$35,000, at 16th street and Park road, on which to erect two apartment-houses, each four stories high.

BANK AND OFFICE BUILDINGS

Atlanta, Ga. — Edwin P. Ansley, 71 North Forsyth St., representing Realty Trust Co., awarded contract to H. L. Stevens Company, Louisville, Ky., and other cities, for building theater and office structure for company; building will be fireproof; eight stories; 100x135 feet; reinforced concrete construction; exterior of deep-purple vitrified brick, trimmed in terra-cotta of limestone color; granite base about six feet high around entire building; copper cornices; front to be used for office purposes and rear for theater; roof garden; electric lighting; three electric elevators and freight lift; rathskeller in basement to be connected by dumbwaiters with roof garden; to be heated by Plenum system of forced draught; office building to contain 160 offices, with lavatories and coat closets, providing 30,000 square feet of renting space; mosaic tile flooring; excavation will be done by county and has begun; theater and roof garden leased by Ben Hahn; estimated cost, \$225,000; A. Ten Eyck Brown, 71 North Forsyth St., Atlanta, prepared plans. (Mentioned in November.)

Atlanta, Ga. — Mrs. Ethel Toy Lamar, care Forrest and George Adair, purchased site 21x36 feet, for \$65,000, adjoining site, 50x100 feet, already owned, and contemplates erecting office building.

Barbourville, Ky. — Lunsford, Lawson & Detherage will erect four-story brick building to contain theater, business and office rooms; cost about \$50,000; plans have been drawn.

Beaumont, Texas. — Commercial National Bank, John C. Ward, president, will erect bank building.

Brownwood, Texas. — Brownwood National Bank will, it is reported, erect five-story office building.

Bryan, Texas. — F. D. Perkins, McKinney, Texas, will let contract about February 15 for erection of building recently mentioned; two-story structure; 50x100 feet; to contain bank, grocery store and offices; ordinary construction; electric lighting; cost \$15,000; plans by J. H. Scott, Waco, Texas.

Covington, Va. — Citizens' National Bank awarded contract to J. R. Jones of Covington for erection of bank building; two stories; 32x70 feet; pressed brick; cost about \$12,000. (Recently mentioned.)

El Reno, Okla. — M. A. Ashbrook of Conservative Investment Co. purchased site from Dr. John Threadgill, Oklahoma City, Okla., on which to erect office building.

Fort Smith, Ark. — Mrs. Fannie Cohn will erect 10-story building.

Frederick, Md. — Franklin Savings Bank has had plans prepared for bank building; three stories; front of stone and brick; second and third floors to be divided into apartments.

Hendersonville, N. C. — First National Bank awarded contract to Henry Jordan of Hendersonville for erection of bank and office building; three stories; ordinary construction; 25x130 feet; steam heat; electric lighting; estimated cost, \$10,000; plans by Shand & LaFaye of Columbia, S. C. (Mentioned in November.)

Knoxville, Tenn. — S. M. Baumont & Co. are proceeding with erection of proposed build-

ing for Knoxville Banking & Trust Co.; structure is to be two stories and basement; brick; 28x26 feet; cost about \$4000; plans by C. A. Hayes of Knoxville.

Laurel, Miss. — Eastman, Gardiner & Co. purchased site on which they were reported as to erect office building.

Little Rock, Ark. — J. M. Whitehead of Little Rock is preparing plans for Board of Trade building recently mentioned; four stories; auditorium on second floor, 40x47 feet, and two stories high; Renaissance style of architecture; 50x140 feet; hot-water heat; electric and gas lighting; electric passenger elevator; cost \$20,000; George R. Brown, secretary Board of Trade.

Madisonville, Texas. — Farmers' State Bank will erect brick bank building.

Miami, Fla. — Enloe & Skaggs will open bids about May 1 for erection of \$6000 office building recently mentioned; plans by W. C. De Garmo; two-story structure; 25x60 feet; reinforced concrete standard walls. (See "Machinery Wanted.")

Oklahoma City, Okla. — Fred C. Miller, Detroit, Mich., purchased site, 100x140 feet, at Oklahoma City and reported to erect apartment-house costing \$50,000.

Oklahoma City, Okla. — C. F. Colcord purchased three-fourths interest in site at Grand avenue and Robinson street for \$150,000, and will erect proposed 12-story reinforced concrete office building; plans and specifications have been submitted; estimated cost, \$400,000.

Richmond, Va. — Mutual Assurance Society of Virginia, Edwin A. Palmer, principal agent, to erect three additional stories to Mutual Building, making it a 12-story structure, with 100 more rooms than at present; material to be brick and terra cotta, with steel posts and girders; passenger elevators to be raised, which will require lengthening of cables and enlarging of drums and motors; new machinery to be installed on twelfth floor; plans will be prepared by Clinton & Russell, 32 Nassau St., New York.

Salisbury, N. C. — H. C. Grubb will expend about \$75,000 in erection of office building; seven stories; reinforced concrete; contract for roofing awarded Piper Roofing Co., Durham, N. C. (Mentioned in November.)

Selma, Ala. — Ellasberg Bros. reported as considering erection of six-story office building.

CHURCHES

Abbeville, La. — Catholic Church, contract recently noted awarded to Caldwell Bros., Abbeville, will be of ordinary construction; 60x170 feet; steam heat; electric lighting; cost \$50,000; plans by C. G. Hornald.

Arlington, Texas. — First Baptist Church has had plans prepared by C. W. Bulger & Sons, Dallas, Texas, for edifice; Sunday-school rooms in basement; church auditorium to be finished in mission style; cost \$12,000.

Atlanta, Ga. — Capital Avenue Baptist Church is having plans prepared for edifice to cost \$40,000. Address The Pastor, Capital Avenue Baptist Congregation.

Atlanta, Ga. — Wesley Memorial Church has awarded contract to Moise DeLeon, Atlanta, for erection of edifice recently mentioned; cost \$120,000; structural steel to be used, also ornamental iron, brick, terra-cotta, marble, ornamental plaster, mill work, roofing, etc.; contracts to be let soon on heating, ventilating, plumbing, drainage, electric wiring and elevators; architect, Geo. C. Thompson, 533 Candler Bldg., Atlanta.

Birmingham, Ala. — A. M. E. Zion Church reported to erect brick-and-stone edifice costing about \$25,000. Address The Pastor, A. M. E. Zion Congregation.

Birmingham, Ala. — South Highlands Presbyterian Church contemplates enlarging Sunday-school room. Address The Pastor, South Highlands Presbyterian congregation.

Bogalusa, La. — Baptist Church will erect edifice recently mentioned; plans not drawn; building to contain large auditorium with Sunday-school room attached; hot-air heating; electric lighting; cost \$6000 or more; bids to be opened in about six months; J. E. Brakefield, pastor.

Brownwood, Texas. — Coggin Avenue Baptist Church is inviting bids for erection of edifice. Address The Pastor, Coggin Avenue Baptist congregation.

Clarendon, Texas. — Methodist congregation will erect edifice to cost \$30,000. Address The Pastor, Methodist Church.

Conway, Ark. — First Baptist Church has adopted plans for proposed \$25,000 edifice; construction to begin soon; prices asked on brick work; plans at Conway; J. J. Hurt, pastor and chairman of building committee.

Corpus Christi, Texas. — Baptist congrega-

tion will erect brick edifice. Address The Pastor, Baptist Church.

Dille, Texas. — Catholic Church will erect edifice; contract awarded to Thomas Milhollon, Kyle, Texas, for erection.

Falls Church, Va. — Columbia Baptist Church congregation will erect edifice recently mentioned; cost \$6000; plans by Frank H. Jackson, 1419 G St., Washington, D. C.; main room to seat 250 and Sunday-school room 150; one roof.

Greensboro, N. C. — St. Andrew's Episcopal Church contemplates erecting edifice. Address The Pastor, St. Andrew's Episcopal congregation.

Greenville, S. C. — Second Presbyterian Church is having plans prepared by Edward Choate, Candler Bldg., Atlanta, Ga., for edifice; 100x50 feet; cost about \$21,500; Dr. L. G. Corbett, chairman building committee; E. P. Davis, pastor.

Hagerstown, Md. — Trinity Lutheran Church, Rev. J. I. Simon, pastor, 135 North Potomac St., is having plans prepared by A. A. Ritcher, Lebanon, Pa., for edifice; auditorium about 60x90 feet; Sunday-school room 60x90 feet; parsonage of nine rooms; steam or hot-water heat; combination gas and electric fixtures; date of opening bids not determined; estimated cost, \$60,000.

Huntsville, Ala. — National Primitive Baptist Association will erect memorial building to cost about \$12,000; Elder Elias Patton of Huntsville is secretary of committee.

Jacksonville, Fla. — Main Street Christian Church had plans prepared by R. Lee Seville for one-story frame edifice recently mentioned; work superintended by E. L. McCombs; construction begun.

Kyle, Texas. — Catholic Congregation awarded contract to Thomas Milhollon of Kyle for erection of edifice.

Laurel, Miss. — Main Street Methodist Episcopal Church will have plans and specifications prepared at once for edifice. Address The Pastor, Main Street Methodist Episcopal Congregation. (Recently mentioned.)

Marlin, Texas. — Methodist Church, Dr. I. F. Betts, pastor, will erect edifice; site 105x208 feet.

Martindale, Texas. — Thomas Milhollon, Kyle, Texas, has contract to erect Catholic Church edifice at Martindale.

Norfolk, Va. — South Norfolk Baptist Church, Rev. Q. C. Davis, pastor, will erect edifice; brick; seating capacity 1000, including seating capacity of present building, which will be removed to rear of lot and used as Sunday-school room; cost about \$10,000.

Odenville, Ala. — Baptist congregation will erect edifice. Address The Pastor, Baptist Church.

San Marcos, Texas. — Methodist Church, Rev. John Anderson, pastor, is considering erection of edifice to cost about \$50,000.

St. Petersburg, Fla. — Grace Baptist Church will open bids about February 10 for erection of edifice; about 50x100 feet; partly two-storied; brick; pressed-brick front; ordinary construction; plans by Bonniwell & Son, St. Petersburg.

Woodruff, S. C. — Baptist congregation will erect edifice to cost about \$10,000. Address The Pastor, Baptist Church.

Winston-Salem, N. C. — Burkhead M. E. Church is having plans and specifications prepared for brick edifice. Address The Pastor, Burkhead M. E. congregation.

COURTHOUSES

Pulaski, Tenn. — Giles county awarded contract to George Moore & Sons, Nashville, Tenn., for erection of courthouse, stone and brick; two stories and basement; 76x120 feet; fireproof; steam heat; electric lighting; boiler, etc., already installed; contracts all awarded; building complete and furnished estimated to cost \$130,000. Plans by Benjamin B. Smith, 22½ Perry St., Montgomery, Ala. W. P. Hart, secretary Giles County Courthouse Commissioners. (Recently mentioned.)

DWELLINGS

Anderson, S. C. — Paul Crowther awarded contract to J. A. Brown, Box 335, Anderson, for erection of residence previously mentioned; colonial style; 14 rooms; electric lighting; cost \$8000; plans by J. H. Casey, Anderson.

Anderson, S. C. — H. R. Wells awarded contract to J. A. Brown, Box 335, Anderson, for erection of residence recently mentioned; frame; eight rooms; electric lighting; cost \$3000; plans by J. H. Casey, Anderson.

Atlanta, Ga. — H. M. Willett has purchased site 100x350 feet and will erect residence.

Atlanta, Ga. — Southern Building & Im-

provement Co., F. F. Spencer, C.E., superintendent, Century Bldg., will erect five bungalows at Inman Park; cost from \$4200 to \$5000 each; construction to begin at once. *

Baltimore, Md.—F. E. Tobe, 1821 Moreland Ave., will erect 12 dwellings on Moreland avenue; two stories; brick; foundations of heavy stone laid in cement; Carey roofing; cost \$20,000; hot-water heat; gas and electric lighting; one dwelling 15 feet 7½ inches by 56 feet, one 15½ feet by 56 feet, ten 14 feet 3 inches by 56 feet; construction by owner, to begin at once.

Baltimore, Md.—Jacob Wheatfield, 259 Calvert Bldg., is having plans prepared by John Freund, Jr., 210 East Lexington St., Baltimore, for 28 dwellings on Columbia avenue; 14x45 feet; facades of pressed brick; cut-stone trimmings; hot-air heat; sanitary plumbing; sewer connections; gas lighting; cost \$45,000.

Baltimore, Md.—T. F. Hare of T. F. Hare Company, 22 East Lexington St., is having plans prepared by Jacob F. Gerwig, 210 East Lexington St., Baltimore, for five dwellings on Windsor avenue; 16x56 feet; foundations heavy stone and concrete; fancy buff brick with stone trimmings; fancy galvanized-iron cornices; steam heat; electric lights; cost about \$12,000.

Baltimore, Md.—F. E. Beall, 213 St. Paul St., Baltimore, has prepared plans for 12 dwellings on Fairmount avenue; two stories; brick; 14x45 feet; foundations heavy stone laid in cement; ornamental galvanized cornices; cost about \$15,000.

Baltimore, Md.—John T. Ensor awarded contract to R. E. Blatchley & Son, 2567 York road, Baltimore, for erection of three dwellings on York road; 16x52 feet; two stories; brick and stone; concrete foundations; tin roofs; steam heat; electric lights; cost about \$10,000.

Baltimore, Md.—George W. Singer, 643 N. Carey St., has had plans prepared by Jacob F. Gerwig, 210 E. Lexington St., Baltimore, for five residences on Kate avenue; two stories; brick; 14x42 feet; tin roofs; cost about \$5000.

Baltimore, Md.—Wm. A. Davidson, Jr., 1700 Thomas Ave., owner, will construct five two-story dwellings; hot-air heating; gas lighting; cost \$1000 each; ordinary construction; 13x40 feet; plans by Jacob F. Gerwig, 210 East Lexington St., Baltimore. (Recently noted as 10 dwellings.)

Baltimore, Md.—Provident Realty Corporation, Pearre E. Crowl, president, has had plans prepared by Henry J. Tinley, Hoffman Bldg., Baltimore, for six dwellings at Walbrook (suburb); 2½ stories; frame; hot-water heating; gas and electric lighting; cost \$4500 each; construction by corporation.

Baltimore, Md.—St. Paul Realty Co., 301 St. Paul St., has had plans prepared by John R. Forsythe, 232 St. Paul St., Baltimore, for seven dwellings; three stories; brick; 16x75 feet; fronts of fancy brick with marble trimmings; cost \$16,000.

Baltimore, Md.—James W. Clayton, 428 North Arlington Ave., has purchased site at North avenue and Lovegrove alley, 125x203 feet, and will erect number of dwellings; buff or pressed brick; three stories; steam heat; electric lights.

Birmingham, Ala.—McConnell & Clark awarded contract to F. C. Gerald for erection of two-story frame dwelling; ordinary construction; hot-air heat; electric lighting; cost \$6000.

Birmingham, Ala.—T. G. Brabston, 1604 First Ave., will open bids about February 5 for erection of \$5000 nine-room frame dwelling recently mentioned; hot-air heat; plans by D. O. Whildin, Title Guarantee Bldg., Birmingham, Ala.

Birmingham, Ala.—Mrs. W. J. Francis will erect \$5000 dwelling; two stories; frame; ordinary construction; hot-air heat; gas and electric lighting.

Birmingham, Ala.—W. G. Oliver had plans prepared by W. G. Weston, Birmingham, for erection of two-story frame residence to cost \$10,000; ordinary construction; hot-air heat; electric lighting.

Birmingham, Ala.—R. H. Terrall had plans prepared by Warren & Welton, Birmingham, for two-story frame residence; ordinary construction; steam heat; electric lighting; cost \$7000.

Birmingham, Ala.—W. L. Sessions had plans prepared by D. O. Whildin, 711 Title Guarantee Bldg., Birmingham, for two-story frame residence; hot-air heat; cost \$2900.

Charlotte, N. C.—W. T. McCoy, recently noted to award contract to R. N. Hunter & Co., Charlotte, for erection of residence, will build seven-room dwelling; frame; ordinary construction; steam heat; cost \$5200; plans by Hook & Rogers, Charlotte.

Chattanooga, Tenn.—T. E. Hall, 104 East 8th St., will erect \$3000 brick dwelling on Vine street; two stories and basement; composition roof; hard pine interior finish; two cabinet mantels; plumbing; gas and electric lighting; plans by Chas. E. Bearden, Chamberlain Bldg., Chattanooga, who is receiving bids.

Columbus, Miss.—C. F. Sherrod reported to erect number of cottages in addition to be called Interstate City; cottages to be occupied by employees of Interstate Lumber Co.

Forest Park, Baltimore, Md.—J. William Sheffer, Bonner Rd., near Garrison Ave., has awarded contract for construction of two dwellings at Forest Park; two and one-half stories; frame; 100x162 feet; foundations bluestone and cement; hot-water heating; slate roof; electric lights; cost \$10,000; plans by Clarence E. Anderson, 30 East Lanvale St.

Frederick, Md.—Braddock Building & Development Co. will erect at Braddock Heights four dwellings; brick and frame.

Gadsden, Ala.—G. W. Sewell awarded contract to Richard Kirby, Gadsden, for erection of six-room cottage.

Georgetown, Ky.—Indian Refining Co. will erect 50 concrete-block cottages for employees; awarded contract to J. B. Blanton Sand Co., Frankfort, Ky., for 100 carloads of sand to be used in the manufacture of the blocks used in construction.

Greensboro, N. C.—Mrs. C. T. McAdoo will erect residence.

Greensboro, N. C.—F. A. Weston will erect residence.

Greenville, S. C.—Second Presbyterian Church will erect manse; nine rooms; cost \$5000; details not decided; Edward Choate, Candler Bldg., Atlanta, Ga., to prepare plans; Mr. Campbell, Greenville, contractor; L. G. Corbett, Greenville, chairman building committee.

Hagerstown, Md.—Trinity Lutheran Church, Rev. J. I. Simon, 135 North Potomac St., pastor, will erect nine-room parsonage; A. A. Ritcher, Lebanon, Pa., is architect. (See "Churches.")

Hagerstown, Md.—F. Wilbur Bridges and Charles C. Easton will erect seven dwellings.

Houston, Texas.—Jas. L. Autry, Box 809, has not had plans completed for residence recently mentioned; brick veneer or frame construction; 12 or 14 rooms; probably gas and hot-water heating; gas and electric lighting; cost \$12,000 to \$18,000; bids to be opened about March 15.

Houston, Texas.—C. H. Tefft has had plans prepared for erection of two-story residence.

Houston, Texas.—J. F. Helms will erect dwelling; cost \$6000.

Huntington, W. Va.—Neel Realty & Improvement Co., C. W. Campbell, president, 7 American Bank Bldg., contemplates erection of 25 to 30 cottages; cost aggregating \$50,000 to \$75,000. (See "Miscellaneous Enterprises.")

Jennings, La.—Baptist congregation will erect parsonage to cost \$2500. Address The Pastor, Baptist Church.

Johnson City, Tenn.—J. A. Muse, J. C. Stone, W. A. Starrett and E. S. Goodloe, all of C. C. & O. Railway, will erect residences in West End.

Johnson City, Tenn.—Frank Gildersleeve has had plans prepared for construction of six two-story dwellings; cost \$20,000.

Kansas City, Mo.—John Adams, secretary United Zinc & Chemical Co., has purchased site of one and a half acres in Sunset Hill Addition and will erect residence.

Kansas City, Mo.—Edward H. Klenzle, manager of the American Sash & Door Co., has purchased site of one and a half acres and will erect residence in Sunset Hill Addition.

Kansas City, Mo.—J. J. Wallace and H. F. Birmingham will erect six brick-and-stucco dwellings, to cost \$20,000.

Kansas City, Mo.—T. J. Green, T. J. Green & Co., will erect residence.

Kansas City, Mo.—S. H. Collins of Emery-Bird-Thayer Dry Goods Co. will erect dwelling in Sunset Hill Addition.

Knoxville, Tenn.—Inge Murphy has awarded contract to Brimer & England Bros., Knoxville, for erection of dwelling; frame; slate roof; steam heat; electric lights; cost \$9000.

Long Beach, Miss.—Carl Gates has had plans prepared by and awarded contract to Kerr & Kelly, Gulfport and Long Beach, Miss., for erection of residence recently mentioned; seven rooms; raised; 42x70 feet; electric lights; cost about \$3500.

Long Beach, Miss.—E. H. Carraway has had plans prepared by Kerr & Kelly, Gulfport and Long Beach, Miss., for residence;

two stories; 10 rooms; colonial style; frame; 60x71 feet; steam heat; electric lights; plumbing; two baths; cost about \$5000. (Recently mentioned.)

Long Beach, Miss.—W. M. Jay awarded contract to Gossitt & Lindsey, Long Beach, for erection of six-room cottage, to cost about \$2500.

Lookout Mountain, Tenn.—Durham Coal & Coke Co., James Bldg., Chattanooga, is receiving proposals for erection of about 50 small frame cottages at coal mines on Lookout Mountain; will award contract in February.

Macon, Ga.—Trustees of Julia F. Jones Benevolent Home have had plans prepared by and awarded contract to W. W. DeHaven, Macon, for erection of two dwellings, each to contain two flats of six rooms each; brick veneered; gas and electric lights; cost \$4800 each.

Marion, N. C.—J. W. Piles has had plans prepared by C. A. Hayes, Knoxville, Tenn., for bungalow at Marion; 52x72 feet; construction has begun.

Nashville, Tenn.—S. T. Satterwhite will erect two stone-veneered residences to cost \$6000.

New Orleans, La.—J. Turner Burke, 1821 Valence St., will erect single-story residence.

New Orleans, La.—Dannemann & Charlton have prepared plans for two-story residence and are preparing plans for two double cottages.

New Orleans, La.—J. T. Kirn has had plans prepared by Rolf A. George, New Orleans, for six frame double cottages; cost about \$17,000; owner builder.

New Orleans, La.—V. Grimmer has prepared plans for residence; two stories; hollow-concrete block.

New Orleans, La.—George W. Reuff, Jr., will erect residence; two stories; concrete block.

New Orleans, La.—Leon Schwartz has had plans prepared by Emile Weil, New Orleans, La., for residence.

New Orleans, La.—Wm. W. Westerfield has had plans prepared by Andy & Benderangle, New Orleans, for residence.

New Orleans, La.—J. T. Kirn, 3310 Cleveland Ave., has had plans prepared by Rolf A. George, 829 Perdido St., New Orleans, for six frame double cottages; cost about \$17,000; owner builder, to be addressed.

New Orleans, La.—W. J. Kane has had plans prepared by R. Sidney Hernandez, New Orleans, for double cottage.

New Orleans, La.—Metropolitan Building Co. has plans for one-story single residence and double two-story residence.

New Orleans, La.—R. R. Barrow, 1410 Valmont St., will erect modern residence to cost from \$10,000 to \$15,000; plans not decided; correspondence with architects and builders desired. (Recently mentioned.)

Norfolk, Va.—Arthur S. Wilkins will erect brick dwelling; cost \$9000; M. M. Salmon, contractor.

Norfolk, Va.—J. E. Barclay will erect two double frame dwellings; cost \$6000.

Norfolk, Va.—C. W. Northern's residence, contract recently noted awarded to J. D. Anders, 23 Essex Bldg., Norfolk, will be of brick, with slate roof; size 35x58 feet; mill construction; hot-air heat; gas and electric lighting; cost \$8000.

Oklahoma City, Okla.—Miss L. Sims awarded contract to E. T. Fries for erection of small frame bungalow recently mentioned; plans by contractor.

Portsmouth, Va.—Mrs. Mary J. Hand awarded contract to Edward Overman, Portsmouth, for erection of residence; two stories; slate roof; cost \$5000.

Richmond, Va.—Mr. Burdett, Old Dominion Steamship Co., will erect brick residence.

Richmond, Va.—Selden Walke is having plans prepared for dwelling.

Richmond, Va.—W. J. Ready will erect six dwellings; cost \$27,000.

Richmond, Va.—Almer S. Pope will erect four dwellings; cost \$14,000.

Ridgedale, Station Chattanooga, Tenn.—Will H. Miller, 1113 George St., contemplates erection of shingle-roof cottage.

Ridgedale, Station Chattanooga, Tenn.—A. S. Johnson, 1102 George St., Ridgedale, will erect two one-story frame dwellings on George street; five rooms each; metal-shingle roof; hard-oil-stain finish; plumbing; electric lighting; cost about \$1250 each; ground broken February 1.

Rome, Ga.—Elbert E. Kirklin, Binghamton, N. Y., has purchased tract of land containing about 210 acres near Lindale and will erect residence.

Sarasota, Fla.—H. Clay Glover, New York, will erect dwelling at Sarasota.

Staunton, Va.—James Bowman awarded contract to Bright & Rohr, Staunton, for erection of tenement-house; two stories; brick; 47½x50½ feet.

St. Elmo, Station Chattanooga, Tenn.—Mrs. Clara Hartford, care of Ira B. Young, 903 Georgia Ave., will erect frame dwelling on Georgia avenue; contract not awarded.

St. Elmo, Station Chattanooga, Tenn.—P. F. Bryan will erect two-story-and-basement frame dwelling on east side of Valley Pond; 10 rooms; shingle roof; concrete basement floor and walk; hard pine interior finish; hot-air or hot-water heat; electric or acetylene-gas lighting; cost about \$3000; construction in spring.

St. Louis, Mo.—A. B. Finch will erect 25 dwellings; cost \$25,000.

St. Petersburg, Fla.—Joseph C. Sibley will open bids about February 10 for construction of tile roof on residence; to replace shingle roof; cost about \$200; plans by Bonniwell & Son, St. Petersburg.

St. Louis, Mo.—Benjamin Gratz will erect three-story brick and stone residence, to cost \$30,000, and \$5000 garage.

St. Louis, Mo.—C. R. Meston of Emerson Electric Co. will erect three-story residence, to cost \$19,000.

Washington, D. C.—Mrs. H. O. Cuthbert has purchased site 21x110 feet for \$325 and will erect dwelling.

Washington, D. C.—Ellhu Root, 1500 Rhode Island Ave. N. W., will have plans prepared by Carrere & Hastings, New York, for residence on 16th street N. W.

Washington, D. C.—Harry Wardman, 1333 G St. N. W., has had plans prepared by A. H. Beers, 1333 G St. N. W., Washington, for one two-story brick dwelling at 2640 Connecticut avenue N. W., and two two-story frame dwellings at 1845 and 1847 Decatur street N. W.; cost \$15,000; owner builder.

Washington, D. C.—Kennedy Bros., 1623 L St. N. W., has had plans prepared by A. H. Sonnenman, 1413 G St. N. W., Washington, for eight dwellings from 2624 to 2628 2nd street N. W.; three stories; brick; cost \$64,000; owner builder.

Washington, D. C.—W. F. Collins awarded contract to A. C. Hess, Washington, for erection of two dwellings at 323 and 325 G street N. W.; two stories; brick; estimated cost, \$6000; plans by C. E. Webb, Warder Bldg., Washington.

Washington, D. C.—Middaugh & Shannon, Colorado Bldg., Washington, D. C., recently noted to erect 41 dwellings in Woodley Park, will install hot-water heat; stone and brick structures; colonial design; hardwood interior finish; cost about \$400,000; plans and construction by others.

Washington, D. C.—H. R. Howenstein Company, 1314 F St. N. W., owners, will themselves erect five two-story brick dwellings; ordinary construction; hot-water heat; gas lighting; cost \$15,000; plans by F. T. Schneider, Washington, D. C. (Recently mentioned.)

GOVERNMENT AND STATE BUILDINGS

Anderson, S. C.—Postoffice and Courthouse, Gude & Co., Atlanta, Ga., are lowest bidders at \$22,500 for erection of U. S. postoffice and courthouse at Anderson; \$70,000 appropriated for building and site. (Recently mentioned.)

Anderson, S. C.—Postoffice.—U. S. Government awarded contract to Gude & Co., Atlanta, Ga., for erection of postoffice building recently mentioned; one and a half stories; 60x75 feet; press brick and soft stone; hot-water heat; electric lighting; cost \$54,000; plans by James Knox Taylor, Treasury Department, Washington, D. C.

Key West, Fla.—Storehouse.—Penn Bridge Co., Beaver Falls, Pa., has contract at \$54,791 to erect proposed storehouse for Bureau of Supplies; structure to have steel frame with walls of concrete blocks; tiled roof; reinforced concrete beams and floors; concrete footings; pile foundation; loading platforms, each 80 feet long by 9 feet wide, with tiled-roof canopies on each side of building; one electric elevator; structure will be 115 feet long and 56 feet wide; height, first floor to eaves, 36 feet; appropriation, \$56,000.

Memphis, Tenn.—Hospital.—Directors Tri-State Memorial Hospital are proceeding with arrangements for proposed hospital to be erected at Memphis by Tennessee, Arkansas and Mississippi, each State to subscribe \$50,000; one wing will be built at a time, and it is expected that first wing, to contain about 100 rooms, can be completed by January, 1910; site has frontage of 250 feet; Rev. J. N. Lawless of Memphis is securing funds

in Tennessee; Rev. T. T. Thompson, Paragould, Ark., in Arkansas, and B. G. Lowry, Blue Mountain, Miss., in Mississippi.

HOTELS

Blacksburg, Va.—J. Bruce Tutwiler, manager Blacksburg Inn, purchased building to which he will remove; structure will be remodeled as hotel with 20 bedrooms, bathrooms, etc. Dr. F. S. Roop and F. S. Slusser purchased Blacksburg Inn and will remodel and enlarge.

Caddo Gap, Ark.—Mrs. Rosa Vaught will erect annex to hotel; contract awarded.

Cameron, Texas.—Jeff D. Hefley has not decided to remodel auditorium into hotel as recently stated.

Charlotte, N. C.—Stonewall Hotel Co. will make another addition of about 20 sleeping-rooms, giving hotel about 125 sleeping-rooms; cost \$10,000; steam heat; electric lighting; J. A. Jones, contractor. (Mentioned at various times.)

Christoval, Texas.—T. I. Morgan contemplates erecting hotel.

Galveston, Texas.—Plans are on file in office of Marion Douglas, Security Bldg., for hotel on Galveston boulevard; three stories; frame; 82 rooms; bathrooms; cost about \$40,000.

Hattiesburg, Miss.—H. C. Greer is having plans prepared for hotel and store building, 60x90 feet.

Houston, Texas.—George P. Macatee, proprietor Macatee Hotel, has had plans prepared for improvements to Macatee Hotel costing about \$20,000.

Lexington, Ky.—Klair & Mooney, proprietors Leland Hotel, have had plans prepared by Frank M. Andrews of New York for hotel; 13 stories; about 70x80 feet; fireproof; cost approximately \$250,000.

Oil City, La.—J. S. Savage will rebuild hotel recently reported burned.

Oil City, La.—E. K. Smith, cashier State National Bank, Texarkana, Ark., will erect two-story concrete hotel at Oil City.

Port O'Connor (not a postoffice), Texas.—Port O'Connor, Rio Grande & Northern Railroad, F. B. Lander, Victoria, Texas, secretary, is arranging, it is reported, to secure location of hotel to cost about \$50,000.

Salisbury, N. C.—National Hotel will be remodeled and electric lighting installed.

Staunton, Va.—M. B. Stoddard of Staunton has contract to remodel Hotel Beverly; new lighting fixtures will be installed, etc.; A. T. Moore, lessee; J. C. Woolfing, manager.

Texas City, Texas.—Dr. H. Wilson reported to erect 40-room hotel, to cost \$25,000.

Weatherford, Okla.—J. E. Bridgeman is planning to erect 50-room hotel.

MISCELLANEOUS STRUCTURES

Arlington, Texas.—Sanitarium, etc.—J. D. Collins will open bids April 1 for erection of buildings recently mentioned; to include two-story frame sanitarium with 36 rooms, natatorium, pavilion and two-story-and-basement bathhouse; ordinary construction; steam heat; electric lighting; cost \$30,000.

Atlanta, Ga.—Business Building.—Thomas J. Wesley, administrator for estate of Lemuel P. Grant, will expend \$5500 to remodel business building.

Atlanta, Ga.—Clubhouse.—Atlanta Boys' Club has had plans prepared by Charles E. Choate, Candler Bldg., Atlanta, for clubhouse, recently noted; three stories and basement; electric lights; probably hot-water heat; printing equipment; swimming-pool with filtering outfit; shower baths; cost about \$50,000.

Birmingham, Ala.—Store.—A. A. Walker awarded contract to Peter E. Bostick, Birmingham, for erection of two-story brick store building; ordinary construction; hot-air heat; electric lighting; cost \$7000; plans by W. C. Weston, Birmingham.

Catonsville, Md.—Garage and Pergola.—Mr. Gustav Gleske awarded contract to Frederick Malsel, Jr., 517 Ingleside Ave., Catonsville, for erection of garage and pergola.

Charleston, S. C.—Convent.—Academy of Our Lady of Mercy will soon award contract for erection of proposed convent; 160x125 feet; pressed brick; Bedford limestone trimmings; three stories and basement; portico with marble pillars; Georgia colonial style. (Previously mentioned.)

Charlotte, N. C.—Clubhouse.—Southern Manufacturers' Club, R. M. Miller, Jr., president, has had plans prepared for proposed \$60,000 club building to be erected during the year; date of opening bids not set.

Conway, Ark.—Stable.—Terry & Woolfort will erect livery and sale barn.

Conway, Ark.—Business Buildings.—H. B.

Ingram will erect two brick business buildings.

Covington, Va.—Lodge Building.—Independent Order of Odd Fellows has purchased site at \$6000 and will erect lodge building.

Dallas, Texas.—Business Building.—S. Marcus has had plans prepared by Lang & Wittichell, Dallas, for erection of business building; three stories and basement; 25x90 feet; pressed brick; Hughes-O'Rourke Construction Co., Dallas, contractor.

Dallas, Texas.—Business Building.—L. A. Pires will erect business building; three stories; brick; cost \$8500.

Dover, Ark.—Store.—W. A. Baird awarded contract to C. B. Wilson, Atkins, Ark., for erection of department store building recently mentioned; two stories; 90x90 feet; brick; cost \$12,000; construction not before July 7. (See "Machinery Wanted.")

El Reno, Okla.—Masonic Temple.—Directors Masonic Temple Association had plans prepared for Masonic Temple; three stories; brick; 45x118 feet; recessed front; cost \$30,000.

Fort Worth, Texas.—Business Building.—R. E. Lewis has had plans prepared for erection of two-story brick building.

Frederick, Md.—Store.—Charles Winebrener will erect store building; 59x100 feet; three stories; brick and steel; contract awarded.

Frederick, Md.—Store.—C. Thomas Kemp will erect three-story store; C. Kemp, Frederick, contractor.

Hagerstown, Md.—Business Building.—R. M. Hays & Bro. will erect brick business building; plans by Klinkhart & Kast, Hagerstown.

Hattiesburg, Miss.—Store.—J. C. Carter will erect store building; brick; two stories.

Hattiesburg, Miss.—Business Building.—Captain Carter will erect two-story business building.

Hickman, Ky.—Business Building.—Elm Camp No. 3, Woodmen of the World, will erect business building to cost about \$12,000; architect not selected; as contemplated, lower floor for business purposes and lodgerooms above; plans and estimates desired; J. T. Dillon, member Board of Managers.

Houma, La.—Business Building.—Leon Heymann will erect two-story fireproof business building; plans not made.

Huntsville, Ala.—Y. M. C. A. Building.—Young Men's Christian Association contemplates erection of \$10,000 building.

Jacksonville, Fla.—Garage.—Fred E. Gilbert awarded contract to Turner Construction Co., 11 Broadway, New York, for construction of proposed reinforced concrete garage at Church and Laura streets; five-story-and-basement building; 102x102 feet.

Jefferson City, Mo.—Stores.—D. L. Butler will erect general merchandise building recently mentioned; construction by days' labor, superintended; two stories; brick; 27½x70 feet; glass front; heaters; electric lighting; plans by Baumann Bros., Knoxville, Tenn., not yet completed.

Jennings, La.—Clubhouse.—Jennings Lawn Tennis Club incorporated with \$10,000 capital stock; George A. Courtney, president; J. H. Helmen, vice-president; Benj. Freeman, secretary; E. A. Lee, treasurer; will erect clubhouse containing bowling alleys, swimming-pool, shower baths, etc.; four tennis courts will be laid out.

Kansas City, Mo.—Hospital.—German Hospital Association will erect \$75,000 addition to German Hospital.

Kansas City, Mo.—Business Building.—John W. Woolfolk will, it is reported, erect \$25,000 business building.

Kansas City, Mo.—Store Building.—Louis Oppenstein and Michael Oppenstein are having plans prepared by Jackson & McIlvahn, Dwight Bldg., Kansas City, Mo., for building; 10 stories; 38½x78 feet; almost entire glass fronts on two streets; steel; reinforced concrete and terra cotta; part of ground floor and two stories leased to Grand Pants Co.

Kansas City, Mo.—Business Building.—Louis Oppenstein and Michael Oppenstein will erect business building; three stories; 49½x115 feet.

Knoxville, Tenn.—Store.—R. F. Graf, Knoxville, has prepared plans for 10-story addition to Miller Store Co.'s buildings; addition will be 124x40 feet; steel construction; fireproof; improvements will give 48,000 feet of floor space; mezzanine floor between first and second floors will provide 1000 square feet additional space.

Laurel, Miss.—Business Building.—Denham Bros. will erect business building.

Laurel, Miss.—Store.—J. D. Warren will erect store; 50x90 feet; brick; plans have been prepared.

Long Beach, Miss.—Sanitarium.—E. H. Caraway will erect proposed \$6000 sanitarium;

two stories; 60x73 feet; mill construction; hot-water heat; electric lighting; plans and construction by D. H. King, Gulfport, Miss.

Louisville, Ky.—Clubhouse.—Louisville Aerie, No. 333, Fraternal Order of Eagles, will issue \$15,000 of bonds for erection of clubhouse.

Madisonville, Texas.—Business Building.—W. A. Price will erect two business buildings; brick; 27x80 feet; Fuqua Bros., Alto, Texas, contractors.

Mulberry, Fla.—Business Building.—Whidden & Whidden awarded contracts to M. A. Connell for woodwork and to Bob Carver for brick work, both of Mulberry, Fla., for two-story brick business building; second floor to be arranged for hotel.

Nashville, Tenn.—Hospital.—University of Nashville, recently noted to open bids February 17 for erection of hospital building, will erect structure five stories and basement; fireproof; reinforced concrete construction; brick walls, trimmed with cut stone; elevator; steam heat; electric light and power; refrigerator plant; plans by Meyer Sturm, Chicago, Ill.; plans and specifications on file at office of C. E. Ferguson, architect, Nashville.

New Orleans, La.—Store.—S. and E. Galletto will erect store building; brick; two stories; cost \$4500.

Oklahoma City, Okla.—Store.—Mrs. A. M. Leverich will erect two-story store building; pressed brick; stone trimmings; plate and common glass; structure 25x150 feet; gas stoves; electric lighting; cost \$8500; plans by Frank D. Hyde, 411 Campbell Bldg., Oklahoma City.

Paris, Ky.—Business Building.—George Rassenfoss is having plans prepared by A. R. Stamler, Paris, for business block; two stories; press brick; 33x92 feet; cost \$12,000.

Richmond, Va.—Clubhouse.—Country Club of Virginia arranging to erect proposed clubhouse; colonial style surrounded by wide porticos; cost \$30,000.

Rocky Mount, N. C.—Business Buildings.—William Parker, Mrs. P. C. Green, Mrs. M. R. Barnes and J. D. Odum will rebuild structures burned.

San Antonio, Texas.—Fair Buildings.—International Fair Association, Vories P. Brown, president, will expend about \$25,000 for remodeling fair grounds and buildings.

Shelby, N. C.—Store Buildings.—A. C. Miller will erect two store buildings; brick with solid glass fronts.

Silver Creek, Miss.—Mercantile Building.—Mrs. Josie B. Mikill awarded contract to Burkes & Fleming, Hattiesburg, Miss., for erection of mercantile building to cost \$2750; brick; 32x85 feet; ordinary fireproof construction; plans by contractor.

Staunton, Va.—Business Building.—John Bowman & Bro. awarded contract to M. B. Stoddard, Staunton, for erection of brick business building.

St. Matthews, S. C.—Store.—J. A. Banks awarded contract to C. F. Zeigler, St. Matthews, for erection of store building 50x60 feet; one story; electric lighting; cost \$3000; plans by Mr. Zeigler. (Recently mentioned.)

St. Louis, Mo.—Garage.—Benjamin Gratz will erect \$5000 garage.

St. Louis, Mo.—Stable.—Charles F. Stewart will erect stable; cost \$10,000.

St. Louis, Mo.—Business Buildings.—Mississippi Valley Trust Co. awarded contract to James Stewart & Co., St. Louis, for erection of business building for Roberts, Johnson & Rand Shoe Co.; 10 stories and basement; 107x133 feet; fireproof; shell steel frame work; cost \$285,000; plans by Theodore Link, St. Louis. (Previously noted.)

Tampa, Fla.—A. Nistal will erect two-story brick building; first floor to contain store; second floor, apartments; cost \$8000; J. C. McNiel, Tampa, contractor.

Tampa, Fla.—Y. M. C. A. Building.—Young Men's Christian Association awarded contract to Worrell & Davis, Tampa, for underground plumbing and to Dekle Investment Co., Tampa, for construction of first floor of association building previously mentioned; plans by Bonfoey & Elliott, Curry Bldg., Tampa.

Teague, Texas.—Business Building.—Y. Hafner, Hillsboro, Texas, will erect brick business building; 30x100 feet.

Temple, Texas.—Supply House.—Gulf, Colorado & Santa Fe Railway, C. F. W. Felt, chief engineer, Galveston, Texas, will, it is reported, erect steel, brick and cement supply house in Temple.

Washington, D. C.—Stable.—Grove Lime & Coal Co. has had plans prepared by and awarded contract to Julius Wenig, 1223 F St. N. W., Washington, for erection of stable at 1st and N streets N. E.; two stories; brick and cement; cost about \$6000.

MUNICIPAL BUILDINGS

Anadarko, Okla.—City Hall and Fire Department.—City has voted \$15,000 of bonds for city hall and fire department. Address The Mayor.

Baltimore, Md.—Engine and Truck Houses, etc.—Architectural Commission, Frank N. Hoen (of A. Hoen & Co., Chester, Chase and Biddle streets), chairman, has selected architects for seven engine and truck houses and additional building at Bayview Asylum, as follows: Engine and truck houses—Paca and Fayette streets, G. Edward Laferty, 11 Pleasant St., cost \$20,000; Gorsuch avenue, Chas. M. Anderson, 324 North Charles St., \$24,000; Caroline street and Eastern Avenue, Charles E. Cassell & Son, 822-825 Law Bldg., \$25,000; Edmondson avenue and Bentalou street, Elliott & Emmart, 1101-1102 Union Trust Bldg., \$24,000; Russell and West streets, Paul Emmart, 210 West Fayette St., \$24,000; addition to No. 1 truckhouse, Gay near Baltimore street, plans already prepared, \$25,000; pipe line station building, D. B. Banks, 203-205 Maryland Savings Bank Bldg., engineer in charge, \$50,000; new building at Bayview Asylum, Parker, Thomas & Rice, 1109-1111 Union Trust Bldg., \$150,000. Plans and specifications are expected to be ready within next month. It is proposed to erect three buildings at Bayview Asylum—hospital to accommodate 100 patients, additional dining-room and rebuild power-house at cost of \$25,000; only one building has been provided for in this year's ordinance of estimates.

Camden, Ark.—City Hall.—City will erect city hall. Address The Mayor.

Galveston, Texas.—Engine-house.—City will erect fire station, estimated to cost \$2400. Address The Mayor.

Dallas, Texas.—Fire Station.—City has had plans prepared by Hubbell & Greene, 408 North Texas Bldg., Dallas, for fire station recently mentioned; two stories; 60x80 feet; cost \$17,500; to open bids in about 30 days.

Jellico, Tenn.—City Hall and Jail.—City contemplates building city hall and jail; latter to have steel cages; brick and stone; cost about \$5000. S. B. Snyder, Mayor.

New Orleans, La.—Engine-house.—City awarded contract to George Gessner and Edward Knoll of New Orleans for erection of engine-house at Villere and Laharpe streets and St. Bernard avenue.

New Orleans, La.—Engine-house.—John Minot is lowest bidder at \$10,500 for erection of two-story brick engine-house on Magazine street; W. J. Hardee, City Engineer. (Recently mentioned.)

Oklahoma City, Okla.—Jail.—City contemplates voting on issuance of \$35,000 of bonds for city jail; Henry M. Scales, Mayor.

Park, Station Knoxville, Tenn.—Fire and Administration Building.—Bids will soon be invited for erection of proposed fire and administration building; two stories; brick; slate roof; 70x35 feet; fire hall, jail and tool-room on first floor; recorder's office, court-room and council-room on second floor; plans by George F. Barber of Knoxville.

Stamford, Texas.—Library.—City will build public library; \$15,000 donated by Andrew Carnegie; plans desired. Address Homer D. Wade, secretary, Stamford.

RAILWAY STATIONS

Cleburne, Texas.—Gulf, Colorado & Santa Fe Railway, C. F. W. Felt, chief engineer, Galveston, Texas, will, it is reported, erect passenger station at Cleburne.

Dublin, Texas.—Texas Central Railroad, H. S. McCall, resident engineer, Waco, Texas, will, it is reported, erect freight depot in Dublin; will be 106x24 feet and include wharf.

Martinsville, Va.—Norfolk & Western Railway, C. S. Churchill, chief engineer, Roanoke, Va., is having plans prepared for passenger station, to cost about \$17,000.

Roanoke, Va.—Virginian Railway, H. Fernstrom, chief engineer, Norfolk, Va., will, it is reported, erect passenger station in Roanoke.

St. Michaels (not a postoffice), La.—Texas & Pacific Railway, B. S. Wathen, chief engineer, Dallas, Texas, will erect \$3000 passenger station; frame, on concrete base, with concrete floors; size 85x30 feet; acetylene gas lighting; construction by company's force; work commenced.

Suffolk, Va.—Norfolk & Western Railway, C. S. Churchill, chief engineer, Roanoke, Va., will, it is reported, erect passenger station at Suffolk to cost about \$30,000.

SCHOOLS

Alexandria, La.—Rapides Parish contemplates erection of four school buildings in Alexandria ward. Address Parish Commissioners.

Anadarko, Okla.—City has voted \$50,000 of bonds for school improvements. Address The Mayor.

Atlanta, Ga.—City has reduced amount of bond issue for schools to \$30,000; election will be held March 28; R. M. Clayton, City Engineer. (Recently mentioned.)

Baltimore, Md.—Architectural Commission, Frank N. Hoen of A. Hoen & Co., Chester, Chase and Biddle Sts., chairman, has selected architects for five school buildings, as follows: Reisterstown road and Fifth avenue, Otto G. Simonson, American Bldg., cost \$125,000; Carroll and Windemere avenues, Baldwin & Pennington, Professional Bldg., \$107,000; Mulberry and Payson streets, Theodore Wells Pletsch, American Bldg., \$120,000; addition to Western High School, Wyatt & Noltling, Keyser Bldg., \$107,000; addition to school on Retreat street, Archer & Allen, Central Savings Bank Bldg., \$15,000; all of Baltimore.

Charleston, W. Va.—W. O. Daum, Secretary Board of Education, Independent District, will open bids February 9 for construction of school building; plans and specifications on file at office of Superintendent, High School Building; bids must be addressed "Bids for Garnett Annex."

Coffeeville, Miss.—City will probably replace school building, recently reported burned, with \$15,000 brick structure; D. E. Kelly, Mayor.

Cookville, Texas.—City contemplates erection of \$10,000 brick school building to replace burned structure. Address The Mayor.

Covington, La.—City will vote on bond issue for completion of school building. Address The Mayor.

Cullman, Ala.—Plans will be received until February 15 for Cullman County High School Building; to cost about \$15,000; W. A. Heck, chairman; John Sutterer, secretary, Building Committee.

Cumberland Gap, Tenn.—Lincoln Memorial University will erect additional buildings; plans include administration, recitation and study building, cost \$80,000, and boys' dormitory to cost \$20,000.

Fitzgerald, Ga.—Bids will be opened February 25 for erection of school building; certified check for \$3000; contractors wishing to bid will immediately file application for drawings and specifications with Edwards & Walters, 613 Chandler Bldg., Atlanta, Ga., accompanied by certified check for \$25, payable to said architects contingent upon return of drawings and specifications and making bona fide bid; subcontractors can procure drawings and specifications on payment of \$10 to architects; plans and specifications on file at offices of J. G. Knapp, Mayor, Fitzgerald, and Atlanta Builders' Exchange, Atlanta, Ga.; heating contractors to comply with all above conditions except certified check with bid will be \$500; bid bonds in neither case acceptable. (See "Machinery Wanted.")

Garland, Texas.—City contemplates issuance of \$10,000 bonds for school improvements. Address The Mayor.

Girard, Ga.—City contemplates erection of \$10,000 central school building; L. J. Hericks and I. I. Moses, building committee.

Henning, Tenn.—City contemplates issuance of \$15,000 of bonds for erection of school building; Harry B. Moorer, Mayor.

Huntsville, Ala.—Prof. S. R. Butler, principal Butler Training School, has awarded contract to Ben Gildwell, Huntsville, for erection of school to accommodate more than 300 students.

Jackson, Miss.—City will probably rebuild Robertson School for negroes recently reported burned; loss about \$18,000. Address The Mayor.

Jenks, Okla.—School District No. 27 will erect \$8000 school building; bonds recently reported voted; T. J. Buck, Tulsa, contractor; construction begun.

Johnson City, Tenn.—City has plans prepared by C. G. Mitchell, Johnson City, for proposed \$35,000 school building; three stories; brick; chapel hall; seating capacity 500.

Lula, Ga.—City will vote February 18 on \$5000 bond issue for erection of school building; J. A. McCubbins, Mayor.

Morven, N. C.—City will vote on \$8000 bond issue for erection of brick school building. Address The Mayor.

Nashville, Tenn.—City will probably vote June 10 on \$300,000 bond issue for erection of high-school building. Address The Mayor.

New Orleans, La.—Marquette Association, B. A. Oxnard, president, will establish Catholic University on Loyola College grounds; first building to be erected will cost \$100,000.

Oklahoma City, Okla.—City will probably vote on \$100,000 bond issue for erection of

two ward school buildings in addition to those already contracted for. Address The Mayor.

Opelousas, La.—City will probably issue \$21,200 of bonds for school improvements. Address The Mayor.

Petersburg, Va.—Finance Committee of Councils will recommend to Common Council appropriation of \$50,000 for school improvements, to be used either for purchasing site and erection of high-school building or for remodeling Anderson school building into high school and erection of two graded school buildings. Address The Mayor.

Raleigh, N. C.—University of North Carolina, Dr. Hubert A. Royter, dean, will erect building for medical department.

Redbay, Ala.—City has voted \$5000 bonds for erection of school building. Address The Mayor.

Red Star, W. Va.—West Virginia Seminary will be rebuilt; building committee, J. M. Arter, Red Star, chairman, will receive competitive plans from architects; as proposed, structure to be of reinforced concrete, cement block or red brick; foundations to cover area of about 7360 square feet, with basement under entire building; basement to have floor of concrete, or pine and hemlock, and to contain kitchen, storeroom, dining-room, pantry, three classrooms, furnace, coalroom, laundry, carpentry-room and printing office; main building to be three stories, and center building two stories; buildings to contain chapel, classrooms, dormitories, baths, etc.; blackboards in walls; porches; steam heat; cisterns; correspondence with contractors desired.

Richmond, Va.—City contemplates issuance of \$425,000 bonds for school improvements, including completion of high school, purchase of sites and erection of two new school buildings, refitting of Leigh school, enlargement and improvement of Monroe school, general repairs and improvements to fire protection and ventilating facilities of other school buildings. Address The Mayor.

Roland Park, Station L, Baltimore, Md.—Country School for Boys, Charles-street Ave. extended, near Merryman Ave., Joseph S. Ames, president, is planning erection of proposed buildings at Roland and Belvedere avenues; site of 37 acres; main building 150x110 feet, to cost \$75,000, with two wings, each 20x60 feet, to cost \$12,000; dormitory 98x40 feet, to cost \$44,000; gymnasium 134x62 feet, to cost \$16,000.

Ruston, La.—State will open bids about March 1 for proposed boys' dormitory; architect not selected; as proposed, structure to be of brick; three stories; 52 rooms; steam heat; electric lighting; cost \$20,000; J. E. Keeny to be addressed.

San Marcos, Texas.—San Marcos Baptist Academy, J. M. Carroll, president, is having plans prepared for \$50,000 boys' dormitory; three stories; pressed brick; steam heat.

Star City, Ark.—Friendship Normal Academy will rebuild school reported burned at loss of \$4000.

Suffolk, Va.—City contemplates expenditure of \$15,000 for school improvements; will either erect two primary schools or one structure to accommodate primary, grammar and high school; council to discuss bond issue at meeting of February 18; John B. Norfleet, Mayor.

Taylor, Texas.—S. F. Evans is chairman of School Board to have plans made for rebuilding school for colored children; to cost \$3000; two stories; seven rooms. (Recently mentioned.)

Washington, D. C.—Pavarini & Wyne, Munsey Bldg., Washington, at \$69,300 are lowest bidders for erection of Business High School building recently noted to be erected on R street N. W.

Yoakum, Texas.—Dan T. Price, Mayor, invites competitive plans, to be considered by Council February 15, for proposed school-house; \$32,000 available; as proposed, structure to have 15 rooms, including auditorium; sanitation, ventilation, light, heating and fireproof arrangements to be considered.

THEATERS

Atlanta, Ga.—Edwin P. Ansley, 71 North Forsyth St., representing Realty Trust Co., awarded contract to H. L. Stevens Company of Louisville, Ky., and other cities, for erection of theater and office building; eight stories; reinforced concrete throughout; fireproof; gallery and balcony of theater supported by trusses; estimated cost, \$225,000; plans by A. Ten Eyck Brown, 71 North Forsyth St., Atlanta. (Mentioned in November. See "Bank and Office Buildings.")

Baltimore, Md.—William E. Heise is having plans and specifications prepared by John J. Stack, 12 East Lexington St., Balti-

more, for moving-picture theater at 829 Greenmount avenue; 18x100 feet; exterior of ornamental metal; electric lighting; seating capacity about 300; cost about \$3500; William F. Welsh, 250 West Preston St., Baltimore, has contract.

Bamberg, S. C.—John F. Folk reported to erect opera-house.

Birmingham, Ala.—Jake Wells Richmond, Va., is considering, it is reported, erection of theater in Birmingham.

Chattanooga, Tenn.—Air Dome, Catron & Albert, proprietors, 835 Market St., will erect open-air theater; cost from \$5000 to \$7000; stage and seats; framework for canvas roof; architect not selected; begin construction last of February.

Conway, Ark.—W. N. Owen, manager Electric Theater, will erect auditorium with seating capacity of about 1000.

Dallas, Texas.—Empire Theater Co. incorporated with \$15,000 capital stock by C. B. Harris, R. L. Stinnett and W. J. Brown.

San Antonio, Texas.—Marvel Theater Co. incorporated with \$15,000 capital stock by John S. Sweet, J. M. Nix and W. W. Walling.

San Marcos, Texas.—W. D. Malone is considering erection of opera-house.

WAREHOUSES

Baltimore, Md.—George W. Eisenhauer, president Eisenhauer MacLean Company, 509-521 South Central Ave., purchased site 39x75 feet on which to erect warehouse.

Jacksonville, Fla.—Merchants & Miners' Transportation Co., Joseph C. Whitney, president, Light and German Sts., Baltimore, Md., will improve steamship terminal at Jacksonville; will build wharves, warehouses, etc.; no details have been determined; site comprises 20 acres, fronting 800 feet on St. John's River. (See "Miscellaneous Enterprises," Baltimore, Md.)

Morgan City, La.—Waters-Pearce Oil Co., St. Louis, Mo., will erect warehouse and tank at Morgan City; contract awarded.

Nacogdoches, Texas.—Harry Taussig of Taussig & Co., Chicago, Ill., is in Galveston considering, it is reported, erection of warehouse.

New Orleans, La.—Otis Elevator Co., main office, 17 Battery Pl., New York, recently noted to erect building in New Orleans, will erect two-story structure, 30x100 feet; cost about \$10,000.

New Orleans, La.—Wells-Fargo Express Co., 51 Broadway, New York, will erect warehouse and stable at New Orleans.

Nickelville, Va.—McConnell & Blackwell will erect fertilizer warehouse.

Oklahoma City, Okla.—J. I. Case Company, C. O. Landes, acting manager, will rebuild warehouse reported burned.

Orange, Texas.—Pond Manufacturing Co. will erect warehouse.

St. Louis, Mo.—Henry Marx of Henry Marx & Co., 224 N. Main St., purchased site, 44x142 feet, on which to erect four-story brick-and-steel warehouse to cost about \$50,000.

RAILROAD CONSTRUCTION

RAILWAYS

Altus, Okla.—President Edward Kennedy of the Altus, Roswell & El Paso Railway Co. writes the Manufacturers' Record that contract has been signed with St. Louis parties to build entire line of 286 miles from Altus, Okla., to Roswell, N. M., to equip it and assume all existing contracts. A contractor named Key has the first 33 miles west from Altus; Tucker & Palmer have the 40 miles west from Lubbock, Texas, and West & Co. have the work east of Roswell, N. M. There is about 100 miles graded and ready for track. Road runs via Childress, Texas.

Asheville, N. C.—J. M. Chiles, secretary and treasurer, is reported as saying that the Swannanoa Valley Company will submit a proposition for an electric road between Biltmore and Montreat, construction to begin in the spring. F. T. Merriwether is president and W. R. Whitson vice-president.

Asheville, N. C.—Contractor Murray, it is reported, is preparing to build a two or three mile spur from Craggy Station, on the Southern Railway, to the plant of the National Casket Co., near Asheville.

Bentonville, Ark.—Reported the city has let contract to the Western Surety & Investment Co. of Minneapolis, Minn., to build an electric railway from Joplin, Mo., to Bentonville, Gentry, Tarrytown and Springdale, thence back to Bentonville. A bonus of \$55,000 is guaranteed the builders when line is completed. A. W. Morris is Mayor.

Brownsville, Texas.—Reported that the St. Louis, Brownsville & Mexico Railway will build an extension over the Rio Grande to Matamoros, Mexico, and that contract for the bridge has been let. E. C. Burgess is resident engineer at Kingsville, Texas.

Carrizo Springs, Texas.—President Asher Richardson of the Nueces Valley, Rio Grande & Mexico Railroad Co. writes from San Antonio, Texas, to the Manufacturers' Record that the name will be changed to Asherton & Gulf Railroad and the headquarters moved from Carrizo Springs to Asherton, Texas. After building from Artesia, on the International & Great Northern Railroad, west to Asherton, 32 miles, the line will probably be extended down the Nueces Valley toward the Gulf. Mr. Richardson is financing the line, and so far no bonds have been issued. The directors are W. W. Williams, J. M. Crump, W. W. McKinley, W. A. H. Miller, A. W. McElwee, A. M. Wells; Judge John T. Bevin, vice president; Z. T. Nesbit, John C. Dennis and Asher Richardson, president and general manager. Another report says the contract from Artesia to Asherton is let to the J. F. Burns Construction Co. of Devine, Texas. Ten miles of grading is done; tracklaying to begin immediately with 65-pound rails. Expected to begin work soon from Artesia east to Aransas Pass and west from Asherton to Eagle Pass, Texas. Total length of line authorized, 300 miles. R. H. Gresham of San Antonio, Texas, is chief engineer.

Central City, Ky.—An official is reported as saying that the Kentucky Midland Railway will build an extension to Madisonville, Ky., 16 miles. Survey is made. Not yet decided when contracts will be let. M. M. Wheeler is chief engineer at Central City, Ky., and G. B. Hengen is president at 655 Monadnock Block, Chicago.

Chattanooga, Tenn.—Mr. Wm. J. Oliver of Knoxville, Tenn., in a letter to the Manufacturers' Record, denies a press report from Chattanooga which quoted him as saying that he expected to resume work, possibly within 30 days, on all his railroad contracts there and in that vicinity.

Childress, Texas.—Reported that a movement is in progress to build a railroad from Miami to Childress, Texas. Those mentioned are R. E. Davis, an engineer of Amarillo, Texas; N. D. Pound of the Pound Construction & Engineering Co. of Chicago; George B. Dunn and C. B. Reid of Mobette, Texas. The proposition to the Board of Trade is to build via Wellington.

Citronelle, Ala.—Reported that surveys will immediately be made for the projected Citronelle & Gulf Interurban Electric Railway promoted by G. M. Bressler, representing the Elkins interests of Louisville. Upon completion of engineering, construction is to start at once.

Crowley, La.—C. C. Genung of Evansville, Ind., is reported to have made an inspection of route for the proposed railroad from Crowley to Lake Arthur, 20 miles, and will, it is stated, recommend construction. The Texas & Pacific Railway is reported back of the plan. D. B. Howell of Lake Arthur has been named in connection with it.

Dallas, Texas.—J. W. Robins, general superintendent of the Chicago, Rock Island & Gulf Railway, is reported as saying that the company will build this year its projected freight terminals in Dallas, which, according to a report, will cost several hundred thousands of dollars. C. M. Case is chief engineer at Fort Worth, Texas.

Elmina, Texas.—Reported that the Elmina & Eastern Transportation Co. will build an extension from Elmina east five miles, the company doing its own work. J. W. Hobbs is general manager.

El Paso, Texas.—Reported that the El Paso & Kansas City Short Line will build from the southern boundary of New Mexico northeast to Quanah, Texas, on the St. Louis & San Francisco Railroad. It passes through 10 Texas counties. Bonuses amounting to nearly \$800,000 are reported and right of way secured for nearly 500 miles. J. L. Bell of El Paso, Texas, and 25 Broad St., New York, is interested.

Farmerville, La.—Reported that S. R. Neal and N. M. George of Farmerville have a contract to build an extension to Farmerville for the Arkansas Southeastern Railroad. W. H. Fields of Randolph, La., is superintendent and N. P. Jackson of Farmerville is chief engineer.

Fayetteville, N. C.—Official: Confirm report that survey is being made between Fayetteville and Hope Mills by the Raleigh & Southport Railway. President Mills has not yet decided fully when construction will begin.

Fort Worth, Texas.—Mr. B. G. Leake, chief

engineer, informs the Manufacturers' Record that the Southern Traction Co. will be the name of the corporation which will build the proposed interurban railway from Fort Worth via Everman, Burleson and Joshua to Cleburne, Texas. Preliminary surveys completed and location surveys will be made immediately. He cannot now state when bids will be requested for construction and equipment. F. H. Peters will be president, and headquarters are at Room 23 Dundee Bldg., Fort Worth. S. B. Hovey, H. H. Cobb and T. Yarbrough, all of Fort Worth, are the trustees. It is proposed to use high-speed gasoline motor cars.

Glenwood, Ark.—The A. L. Clark Lumber Co. is reported to be building a standard-gauge railroad from Glenwood through timber lands toward Hot Springs. T. R. Brunson of Glenwood is engineer.

Golden City, Mo.—An officer of the Oklahoma & Golden City Railway Co. is reported as saying that construction contracts will be let in April. Five large bridges will be built, besides smaller ones and some trestle. Grades less than 1 per cent. and easy curves. The first route to be built is from Golden City northeast to Stockton, Mo.; also southeast from Golden City to Carthage, Mo. Afterwards construction will begin at Pawhuska, Okla., northeast via Bartlesville and Miami, Okla., to Joplin and Carthage, Mo.; also from Jefferson City, Mo., southwest via Brazito, Climax Springs and Humansville to Stockton, Mo. There will be a branch from Climax Springs to Springfield, Mo. W. S. Pope of Jefferson City is president, J. A. Griesel of Golden City is general manager, E. M. Dempsey is vice-president and W. S. Hawkins of Pawhuska, Okla., is chief engineer.

Gould, Ark.—A. E. Smith, general freight and passenger agent of the Gould Southwestern Railway, is reported as saying that an extension to Fordyce, Ark., on the Rock Island and the Cotton Belt lines, is projected. S. G. McClellan is general manager at Gould, Ark. Present line extends from Gould to Star City, 22 miles.

Greenville, S. C.—L. M. Hubbard and associates will, it is reported, finance the proposed Paris Mountain Electric Railway, to be built from Greenville to the summit of the mountain. John Wood, secretary of the Board of Trade; A. E. Sussex and others are also concerned.

Greenville, S. C.—Mr. A. E. Sussex writes the Manufacturers' Record that the Chicago Development Co. has offered to build and operate an electric railway from a point in Greenville to the summit of Paris Mountain, about eight miles, if Greenville will subscribe \$30,000 to be paid on operation.

Harrison, Ark.—W. A. Squires, promoter of the proposed Harrison & Mineral Belt Railroad, is reported as saying that financing is completed to build the first eight miles from Harrison to a point near Bergman, on the Missouri Pacific Railway. W. J. Myers, John A. Bunch, John P. Crumpler, B. Parker, J. R. Newman and A. J. Lopp are also mentioned.

Hobart, Okla.—The Hobart Interurban Railway Co., according to official information received by the Manufacturers' Record, is laying out three lines of road, approximately 200 miles altogether. One route is from Hobart to El Reno and Oklahoma City; the second from Hobart to Sayre and Cheyenne, Okla., and Canadian, Texas, and another to Chattanooga, Okla., and Wichita Falls, Texas. It is expected to begin construction about April 15. C. Townsend Blake, Wm. T. Croslen, C. L. Greer and T. H. Williams are among those interested.

High Point, N. C.—Bird S. Coler of W. N. Coler & Co., 59 Cedar St., New York, is reported to have purchased for a syndicate the interest of E. D. Steele of High Point in the North Carolina Electric Co., and the proposed railway will be built from High Point to Thomasville and other places.

Huntsville, Ala.—The Nashville, Fayetteville & Birmingham Railway Co. has been incorporated at Huntsville to build a line from Nashville, Tenn., to Birmingham, Ala. The incorporators are John C. Diemer, president; James A. Moores, secretary; J. M. Robertson, treasurer; N. S. Boone, S. W. Fleming, Green F. Pitts and H. K. Bryson, all of Lincoln county, Tennessee. Fayetteville being the county seat. Capital \$50,000, subscribed. Huntsville is named as headquarters. Reported that rights of way of the former Decatur, Chesapeake & New Orleans Railway between Fayetteville and Shelbyville, Tenn., have been acquired.

Jacksonville, Fla.—George F. Montgomery of Jacksonville is reported interested in a plan to build a railroad which will be part of a new route from Jacksonville via Albany, Ga., to Chattanooga, Tenn.

Kansas City, Mo.—The Marlam Construction Co., Dwight Building, Kansas City, is reported to have construction contract for the Kansas City & Kansas City Southwestern Railway. Whitised Laming of Tonganoxie, Kans., is president of the railway.

Laurinburg, N. C.—An officer of the Aberdeen & Rockfish Railway informs the Manufacturers' Record that there is nothing definite as to building an extension from Raeford to Laurinburg, but it may develop later.

Lexington, Ky.—Reported that the Lexington & Eastern Railroad, 94 miles long from Lexington to Jackson, Ky., has been sold to a syndicate and that extensions will be made. W. A. McDowell is general manager and John Marston, Jr., chief engineer, both at Lexington.

Lipan, Texas.—A mass meeting, it is reported, has given a bonus of \$1,500 for the proposed railroad from Tolar to Lipan, to be built by the Western Construction Co.

Lockney, Texas.—A letter to the Manufacturers' Record says that the people of Lockney have signed a contract with Edward Kennedy of Altus, Okla., president of the Altus, Roswell & El Paso Railway, for the construction of that line via Lockney.

Louisville, Ky.—The Louisville & Nashville Railroad has sold \$29,864,000 of bonds to J. P. Morgan & Co. of New York, and will redeem \$23,000,000 of bonds in April, leaving about \$6,000,000 for improvements. W. H. Courtenay is chief engineer at Louisville, Ky.

Millerton, Okla.—The Miller Lumber Co. of Millerton informs the Manufacturers' Record that it is starting a standard-gauge logging railroad, to be at present 15 miles long, north from Millerton, on the A. & C. division of the Frisco, into timber land.

Moccasin Gap, Va.—J. H. McCue, manager of the Virginia & Southwestern Railway, Bristol, Tenn., is quoted as saying that about 75 per cent. of the grading on the Holston River Railroad from Moccasin Gap to Persla, Tenn., 38 miles, is done and that contract for the rest will be let in a week or 10 days. Masonry is all practically finished and bridges ready to be placed.

Monroe, La.—Walter C. Teter, 10 Wall St., New York, is reported to be investigating the Monroe, Farmerville & Northwestern Railroad with a view to construction. D. H. Nichols of Monroe, La., general manager, is said to represent J. A. Taylor & Co. of New York. Mr. Teter is quoted as saying that construction depends on encouragement offered locally.

Morgantown, W. Va.—The Deckers Creek & Cheat River Railroad Co. is reported granted a franchise from the court of Monongalia county to build an electric railway from Grantville via Morgantown to Dellslow, and later to Cheat River. H. R. Warfield of Morgantown, W. Va., is president.

Mt. Pleasant, Texas.—The Paris & Mt. Pleasant Railroad Co., lately organized, has purchased the tramroad of the Hoffman Heading & Stave Co., 10 miles long out of Mt. Pleasant, and will extend it 40 miles to Paris, Texas. R. F. Scott of Paris, Texas, is president. Construction to begin immediately. Incorporation articles are reported approved. Capital \$75,000. The incorporators are R. F. Scott, T. J. Record, S. W. Williams, N. H. Ragland, J. J. Culbertson, H. P. Mayer, A. N. Rodgers, all of Paris, and H. A. Wilson, C. O. Lide and E. S. Lillienstern of Mt. Pleasant.

Mount Vernon, Texas.—The Mount Vernon Commercial Club is reported back of a movement to raise \$10,000 bonus for a railroad to run north and south from the town.

Muskogee, Okla.—The Missouri, Kansas & Texas Railway, it is reported, will lower its tracks through Muskogee to a point 15 feet below the street grade. S. B. Fisher is chief engineer at St. Louis, Mo.

Newport News, Va.—Mr. J. L. Patton writes the Manufacturers' Record confirming the report that some Western people have been looking into a proposition for a railroad from Newport News to Yorktown, Va., but nothing has been done.

Oakland, Md.—Reported that the Oakland, Swallow Falls & Uniontown Electric Railway Co. has located its proposed line from Oakland, Md., to Uniontown, Pa., with a branch about two miles long from Swallow Falls to the hydro-electric plant; also a branch from Cranestown to Kingwood, W. Va.; length of line, 50 miles. A. G. Sturgiss is president; Bowie Johnson, secretary; Jas. D. Hamill, treasurer; H. P. Tasker, general manager, all at Oakland. J. D. Hogg of Connellsville, Pa., is chief engineer.

Oklahoma City, Okla.—B. F. Yoakum, chairman of the executive committee of the Frisco system, is reported as saying that as soon as the Tulsa and Enid line is finished, ballasting will begin between Enid and Okla-

homa City. J. F. Hinckley is chief engineer of construction at St. Louis.

Quanah, Texas.—The Quanah, Acme & Pacific Railway Company is the new name of the Acme, Red River & Northern Railway of Quanah, which amended its charter and proposes to build an extension of 50 miles from Quanah into Cottle county. D. E. Decker of Quanah is general attorney. Capital was increased from \$20,000 to \$70,000. Road is now 12 miles long, connecting Quanah, Acme and Salina. Sam Lazarus is president, Charles H. Sommer vice-president, the other directors being Mr. Decker and T. H. Hawkins, secretary and treasurer; Charles E. Ensminger, second vice-president; W. D. Summerfield and C. B. Dorchester.

Pensacola, Fla.—C. W. Lamar of the American National Bank represents, it is reported, well-known railroad men who desire to build a railroad from Pensacola northwest. The Council, it is reported, has revoked franchises previously granted to the Pensacola, Alabama & Western and the Pensacola & Northeastern railroads.

Ravenscroft, Tenn.—Official: The Tennessee Northeastern Railroad Co. is making surveys for a standard-gauge railroad from a point near Winchester Siding, Tenn., on the Queen and Crescent Route, through Scott, Fentress and Cumberland counties to a point on the Nashville, Chattanooga & St. Louis Railway at or near Ravenscroft, Tenn., approximately 80 miles. The directors are President D. L. Fickes of Scranton, Pa.; vice-president, J. N. Graves of Jermyn, Pa.; secretary, Ward R. Case of Jamestown, Tenn.; treasurer, Philo Chesbrough of Scranton, Pa., and D. L. Potter of Dalton, Ga.

Roanoke, Va.—Reported that the Norfolk & Western Railway will immediately begin construction of a branch from Matewan, W. Va., to a new coal field on Mail Creek, seven miles. C. S. Churchill is chief engineer at Roanoke, Va.

Rogers, Ark.—An organization is formed, it is reported, to build an electric railway from Rogers 35 miles via Prairie Creek, Brightwater, Avoca and Elkhorn, thence five miles beyond Pea Ridge. A preliminary survey is to be made. A. R. Potter is chairman and R. A. Patterson secretary at Rogers, Ark.

Russellville, Ala.—Capt. W. H. Norris of Russellville is reported interested in a plan to build an electric railway from Russellville to Decatur, Ala.

San Antonio, Texas.—Reported that a Dutch syndicate, represented by D. C. Weidemann and Von Bloemen Waanders (the latter being the engineer) of The Hague, Holland, has contracted to build the Port O'Connor, Rio Grande & Northern Railroad to connect San Antonio, Seguin, Gonzales, Smithville, Yoakum, Victoria and Port O'Connor at a cost of about \$5,000,000. Main lines will be 234 miles long with 75-pound rails; sidings 16 miles. Contract was closed with Mike Goggin of San Antonio and W. I. Allen of Victoria, Texas, the latter being president and general manager. Construction to begin April 15 or May 1 at Victoria. An old grade from Port O'Connor northward 90 miles will be used.

Savannah, Ga.—E. H. Harriman, while in Savannah, is reported as saying that the Central of Georgia Railway will have its curves and grades revised. C. K. Lawrence is chief engineer at Savannah.

Sedgwick, Ark.—The Cache Valley Railroad is reported to have made surveys and secured capital for an extension between Paragould, Sedgwick and Newport, Ark., 73 miles. N. D. Mitchell is chief engineer and G. W. L. Brown general manager, both at Sedgwick.

Seneca, S. C.—Mr. A. W. Thompson of Seneca writes the Manufacturers' Record confirming the report that he is projecting an electric railway between Walhalla and Seneca.

Sewell, W. Va.—The Sewell Lumber Co., with headquarters at Parkersburg, W. Va., will, according to a letter received by the Manufacturers' Record from President F. O. Havener, establish mills at Sewell, W. Va., and will build a narrow-gauge logging railroad with 35-pound steel rails, which have been ordered.

Sparks, Okla.—The Atchison, Topeka & Santa Fe Railway, it is reported, will rebuild about 20 miles of line between Sparks and Meeker, Okla., an entirely new route being followed about two miles east of the present route to avoid floods. C. A. Morse is chief engineer at Topeka, Kan.

Stephenville, Texas.—B. C. Cage, president of the Stephenville North & South Texas Railway, is reported as saying that an extension north to the coal fields at Thurber will be built in the near future; also that an extension south about 65 miles will be made via Goldthwaite to Llano, Texas.

St. Louis, Mo.—Speyer & Co. of New York,

it is reported, have bought \$3,310,000 of first and refunding 4 per cent. bonds of the Missouri, Kansas & Texas Railway Co., which were in the treasury and were authorized for improvement, equipment, etc. S. B. Fisher, St. Louis, Mo., is chief engineer.

Texarkana, Ark.—A movement is reported under way to build an interurban railway from Texarkana to Sherman, Texas. W. F. Little promoting the plan.

Tyler, Texas.—H. L. Norton of Boston, who several months ago obtained a franchise for an electric railway in Tyler and proposes to build to Morrell, Texas, 56 miles, is reported as saying that the backers may be expected to take action soon. J. H. Bonner of Tyler is also interested.

Vinegar Bend, Ala.—O. H. Broun, civil engineer, is reported to be surveying for the proposed extension of the Alabama & Mississippi Railroad, which contemplates building 80 miles of new line. N. E. Turner is president and M. Lankford is general manager, both at Vinegar Bend, Ala.

Waco, Texas.—Franchise is reported granted to Max Elser and associates of New York for the proposed Temple and Waco Interurban Railway to enter Waco.

Waco, Texas.—An officer of the Northern Texas Traction Co. of Fort Worth, Texas, writes the Manufacturers' Record denying the press report that the company was in communication with the Mayor of Waco concerning a proposed interurban railway out of that city.

Washington, D. C.—The Washington, Baltimore & Annapolis Electric Railway Co. has applied to Congress for authority to lay tracks in Washington from 15th and H streets northeast across the city to the Treasury. J. N. Shannahan is general manager at Baltimore, Md.

Waycross, Ga.—The Helard Cypress Co. is reported to have begun construction on its lumber branch from a connection with the Brunswick & Western Railway to the site of its proposed mill.

STREET RAILWAYS

Atlanta, Ga.—Stockholders of the Georgia Railway & Electric Co. have approved the \$20,000,000 bond issue, of which \$11,255,000 will be used for refunding and the rest for construction in the future, as needed.

Brunswick, Ga.—Grading on the Brunswick Electric Street Railway is expected to begin in February.

Columbia, S. C.—The Columbia Electric Street Railway, Light & Power Co. gives notice that it proposes to build two pieces of double track. William Elliott is general manager.

Gainesville, Texas.—The Manufacturers' Record is informed that E. S. Alnutt will begin construction of a street railway in Gainesville on March 1, the line to be operated with six cylinder motor cars.

Greensboro, N. C.—The Greensboro Electric Co., including street railway and lighting plants, is reported sold to a syndicate organized by W. N. Coler & Co., 59 Cedar St., New York, and extensions are projected. The North Carolina Public Service Co., capital \$3,500,000, will, it is said, be organized and incorporated by the new owners. Bird S. Coler is said to have closed the deal.

Hattiesburg, Miss.—Reported that the Hattiesburg Traction Co. has financed its proposed line and power plant, which will cost about \$1,000,000. Five miles of track are laid.

Huntsville, Ala.—The Huntsville Railway, Light & Power Co. will, it is reported, build an extension of about half a mile. F. N. Lawton is general manager.

Marshall, Texas.—Construction is reported begun on the new electric street railway on Washington avenue.

Mount Pleasant, Texas.—Construction is reported begun on the street railway from Mount Pleasant to Red Mineral Springs, one mile.

Rome, Ga.—The Rome Street Railway & Power Co. has been authorized to issue \$750,000 of bonds, of which \$500,000 are for refunding and \$250,000 for extensions and improvements. H. J. Arnold is superintendent.

St. Louis, Mo.—The St. Louis, Creve Coeur & Western Railway Co., recently incorporated, is to build an electric railway from the city limits of St. Louis to Creve Coeur Lake, 14 miles, and construction may begin by March 1. Line will be double track; capital \$140,000. The directors are Fred. Essen, Hugo Essen, William F. Pfister, Dr. John Pfister, Jacob Studdt, Jr., Dr. Carl Feld, A. H. Werremeyer, Peter Wetzel, at Clayton, Mo.; B. C. Stevens and Richard Stevens.

St. Petersburg, Fla.—The St. Petersburg & Gulf Railway Co., it is reported, will build an extension to Bayboro.

Wichita Falls, Texas.—An electric street railway franchise for 25 years is reported granted to Frank Kell and J. A. Kemp of Wichita Falls.

MACHINERY, PROPOSALS AND SUPPLIES WANTED

Manufacturers and others in need of machinery of any kind are requested to consult our advertising columns, and if they cannot find just what they wish, if they will send us particulars as to the kind of machinery needed we will make their wants known free of cost, and in this way secure the attention of machinery manufacturers throughout the country. The Manufacturers' Record has received during the week the following particulars as to machinery that is wanted.

Acetylene Lighting Plant.—See "Electric-light Plant, etc."

Aeroplane Equipments.—Universal Motor Imports, Ltd., 10 Wilmington Sq., Rosebery Ave., London, W. C., England, wants to correspond with manufacturers of engines and other equipment for aeroplanes.

Air Compressors.—See "Belting Factory Supplies."

Air Compressor.—Box 342, Chattanooga, Tenn., wants 8x8x8 air compressor, steam driven. (See "Machine Tools.")

Air Compressor.—Banner Coal Co., Dawson Springs, Ky., wants (new) small air compressor producing from 200 to 250 cubic feet per minute; straight line; steam driven.

Air Compressor.—Mexican United Mining Co., 1022 Witherspoon Bldg., Philadelphia, Pa., wants new or second-hand air compressor; standard make; capacity 800 cubic feet air per minute; also 8 to 10 air drills, two-inch cylinders, delivered f. o. b. Santa Ana, Mexico.

Air Drills.—Mexican United Mining Co., 1022 Witherspoon Bldg., Philadelphia, Pa., wants 8 to 10 new or second-hand air drills; two-inch cylinders; delivered f. o. b. Santa Ana, Mexico. (See "Air Compressor.")

Amusement Devices.—South Virginia Beach Corporation, 609 Paul-Gale-Greenwood Bldg., Norfolk, Va., in market April 15 for mechanical and other devices for ocean resort; new or second-hand.

Asbestos Machinery.—Chas. Lambert, Statesville, N. C., wants information relative to manufacture of asbestos products; if long and short fiber can be utilized; if dark-colored mineral can be cleaned by machinery to be of reclaimed value; articles manufactured; prices on machinery, etc.

Automobiles and Supplies.—J. L. Dagley, Box 7, Lockney, Texas, wants automobiles and automobile supplies.

Bathing Suits.—South Virginia Beach Corporation, 609 Paul-Gale-Greenwood Bldg., Norfolk, Va., in market April 15 for 500 to 1000 new or slightly-used bathing suits.

Belting Factory Supplies.—The Leather-Cott Company, Rutherford, N. J., wants data and prices on equipment and supplies for proposed plant to manufacture woven fabric belting; equipment, etc., to include electric generators and motors; pipe and fittings, air compressor and tanks, boiler specialties, blowers, weaving machinery, 150 and 250-horse-power Corliss engine, machine tools, T-rails, hydraulic presses, hoists, scales, shafting, pulleys, etc.

Blueprinting Machine.—Preacher & Holman, Augusta, Ga., want to buy electric blueprinting machine.

Blowers.—See "Belting Factory Supplies."

Boiler.—L. A. Duke, Fort Gaines, Fla., wants prices on boiler. (See "Ice Plant.")

Boiler.—C. H. Terry, Kingston, Okla., in market for 30 to 40 horse-power boiler.

Boiler.—Banner Coal Co., Dawson Springs, Ky., wants (new) 60-horse-power return-tubular boiler, half front.

Boiler.—Egwanulti Manufacturing Co., Box 504, Abbeville, La., wants prices on 15 to 20 horse-power boiler.

Boiler.—Mexican United Mining Co., 1022 Witherspoon Bldg., Philadelphia, Pa., wants new or second-hand 50-horse-power horizontal return-tubular locomotive-type boiler, delivered f. o. b. Santa Ana, Mexico.

Boiler.—Joseph S. Davis, Danville, Va., R. F. D. No. 5, wants 20 to 30 horse-power steam boiler, complete with fittings; new or second-hand.

Boiler and Feeder.—Marionneaux, Hebert

& Guidry, Red Eye Plantation, Mark, La., want second-hand 65-horse-power portable boiler, with or without smokestack; also Blake boiler feeder, second-hand, for 100-horse-power boiler.

Boilers.—See "Belting Factory Supplies."

Boilers.—See "Water-works Equipment, etc."

Bottling Machinery.—M. Griffin O'Neil, Dallas, Texas, wants complete equipment for bottling plant in connection with ice and electric plant at Waurika, Okla.

Box Machinery.—E. E. Cammack, Waco, Texas, wants prices on machinery for box factory.

Brass Works.—Powers Fountain Co., Montgomery, Ala., wants to correspond with brass casters and finishers.

Bridge Construction.—Bids will be received at office of P. St. J. Wilson, State Highway Commissioner, Richmond, Va., until February 12 for construction of steel bridge over Clinch River at Dunganon, Va. Plans and specifications on file at above office or of Clerk, Gate City, Va.; certified check, \$200; further information on application to above office.

Bridge Construction.—D. M. Miles, County Supervisor, and D. P. L. Martin, Commissioner, Spartanburg, S. C., will let contract February 5 for building covered wood bridge and one stone abutment at Archer bridge site over Lawson's Fork. Full plans and specifications made known on day of letting; S. M. Bagwell, clerk.

Bridge Construction.—N. R. Cotton, president Police Jury, Catahoula parish, Jonesville, La., will receive plans and specifications, with bids, to be considered at April meeting of Jury, for construction of bridge across Bayou Bushley; structure about 350 feet long, 14 feet wide; cost \$15,000; also proposals for repairs to Jonesville bridge; probable cost \$3500.

Bridge Construction, etc.—S. P. Maury, Charlottesville, Va., wants bids on highway bridge, erected, piers in place; or for iron, delivered Charlottesville; span 126 feet; truss about 20 feet high; live load per linear feet, 1500 pounds; dead load, 533 pounds; 3-inch wooden floor; 12-foot roadway.

Bridge Improvements.—Anne Arundel County Commissioners, Courthouse, Annapolis, Md., will receive bids until February 9 for repair and improvement of draw of the Curtis Creek bridge; work includes furnishing and setting into place complete new pivot under center of draw, together with leveling present track and leaving draw in perfect balance; to furnish and erect into place on draw all attachments necessary for turning draw, with gasoline engine of 3½ horse-power, 450 revolutions per minute, engine to be furnished by county; compound brake to hold draw in heavy wind; all gears to be steel cut and bearings babbitted; to furnish and erect frame house for covering motor and other machinery; plans to be submitted with each proposal; W. W. Webb, clerk.

Buckles.—Fayette Manufacturing Co., Suite 412, Security Trust Co. Bldg., Lexington, Ky., wants buckles for manufacture of abdominal supporters.

Building Materials.—C. B. Wilson, Atkins, Ark., will want prices after April 1 on building materials (brick excepted) for \$12,000 two-story brick department store.

Building Materials.—See "Engineering Literature."

Button Machinery, etc.—Krischer's Manufacturing Co., 186 Lewis St., New York, wants machine for manufacture of wood buttons and wood for same.

Car.—A. V. Kaiser & Co., 729 Drexel Bldg., 5th and Chestnut Sts., Philadelphia, Pa., wants second-hand private car. Give full specifications, photograph, blueprint plan, price and point of shipment.

Cars.—Joseph E. Bowen, 901 Bank of Commerce Bldg., Norfolk, Va., wants several 36-inch-gauge flat and gondola cars.

Cars.—South Virginia Beach Corporation, 609 Paul-Gale-Greenwood Bldg., Norfolk, Va., in market April 15 for second-hand street-railway trailer car; also three sand cars, new or second-hand.

Clothes-rack Parts.—H. L. Smith, 710 Empire Bldg., care of H. T. Hackney Coal Co., Knoxville, Tenn., wants to correspond relative to placing order for manufacture of clothes-rack parts; one part to be pressed from sheetiron, about 1-16 inch or 1-32 inch thick and 5 inches diameter.

Condensers.—See "Gas Condensers."

Cotton Goods.—Fayette Manufacturing Co., Suite 412, Security Trust Co. Bldg., Lexington, Ky., wants prices from manufacturers on sheeting, pillow-casing, material for nurses' aprons, uniforms, bandages, etc.

Crane.—Proposals will be received at Bu-

reau of Supplies and Accounts, Navy Department, Washington, D. C., until February 9 to furnish at Navy-yard, Charleston, S. C., a crane. Applications for proposals should refer to Schedule 818. Blank proposals furnished upon application to Navy Pay Office, Charleston, S. C., or to Bureau; E. B. Rogers, Paymaster-General, U. S. N.

Cranes.—Chatten & Hammond, 1303 Fort Dearborn Bldg., 134 Monroe St., Chicago, Ill., want catalogues of electric traveling cranes.

Ditching Machinery.—John P. Bullington, Estill, Miss., wants power ditching machine for 5000-acre plantation.

Electric-light Plant.—Easley, S. C.—P. Camp Johnson, Easley Oil Mill, Easley, S. C., wants prices on new or second-hand electric plant for about 1000 incandescent and 15 arc lights; direct or belt-connected; no boiler needed.

Electric-light Plant, etc.—J. W. Bell, general manager Rockbridge Alum Springs, Inc., Rockbridge Alum Springs, Va., wants estimates on acetylene and electric lighting plants.

Electric-light Plants.—Southern Engineering & Supply Co., No. 220 Avenue D, San Antonio, Texas, wants to represent manufacturers of electric-lighting machinery.

Electric Lighting.—Town of Highland Park, Va., wants bids for furnishing town with electric lighting on 25-year charter. Address W. P. Redd, Mayor, 601 Third Ave., Highland Park, Richmond, Va.

Electric Motors.—See "Pumps, etc."

Electric-power Plant.—Tampa Foundry & Machine Co., Tampa, Fla., wants electric-power plant; generator to furnish 150 horse-power; gas-producer or crude-oil engine.

Electric Wiring.—Bids will be received at office of James Knox Taylor, Supervising Architect, Treasury Department, Washington, D. C., until March 2 for installation of conduit and electric wiring system for U. S. postoffice and courthouse building at Atlanta, Ga., in accordance with drawings and specification, copies of which may be had at above office or at office of superintendent of construction, Atlanta, at discretion of Supervising Architect.

Electrical Machinery.—See "Belting Factory Supplies."

Electrical Supplies.—J. W. Slate, Quaker Gap Telephone Co., Mizpah, N. C., wants prices on electrical supplies for telephone equipment.

Engine.—C. H. Terry, Kingston, Okla., in market for 25-horse-power steam engine.

Engine.—See "Gasoline Engine."

Engine.—L. A. Duke, Fort Gaines, Fla., wants prices on engine. (See "Ice Plant.")

Engine.—Tampa Foundry & Machine Co., Tampa, Fla., wants gas-producer or crude-oil engine. (See "Electric-power Plant.")

Engine.—Egwanulti Manufacturing Co., Box 504, Abbeville, La., wants prices on 10 to 15 horse-power engine on 50 to 60 pounds steam pressure.

Engine.—Mexican United Mining Co., 1022 Witherspoon Bldg., Philadelphia, Pa., wants new or second-hand plain slide-valve engine capable of developing 70 horse-power under pressure of 85 pounds of steam running normal; delivered f. o. b. Santa Ana, Mexico.

Engineering Literature.—Shand & LaFaye, architects, and Shand Engineering Co., 1233 Washington St., Columbia, S. C., want catalogues and literature of interest to architects and engineers.

Engines.—Eugene Pilegaard, Lobkowitz Platz 1, Vienna, Austria, wants to correspond relative to agency for American engines.

Engines.—See "Belting Factory Supplies."

Engines.—See "Gasoline Engines."

Flooring.—See "Lumber."

Forge.—Howe Company, 237 West Main St., Louisville, Ky., wants portable forge. (See "Machine Tools.")

Foundry Equipment.—Chatten & Hammond, 1303 Fort Dearborn Bldg., 134 Monroe St., Chicago, Ill., want catalogues on foundry equipment, including malleable steel, brass and gray iron, electric traveling cranes and charging machines.

Gas Appliances.—Consolidated Gas Co. of New York, 112 West 42d St., New York, wants catalogues and prices from manufacturers of latest gas-appliance devices. Address Philip Cross, superintendent new-business department.

Gas Condensers.—T. N. Athay, Blackwell, Okla., wants prices on condensers for natural-gas pipe lines.

Gas Regulators.—Powers Fountain Co., Montgomery, Ala., wants to correspond with manufacturers of gas regulators.

Gasoline Engine.—Peacock's Iron Works,

Selma, Ala., wants gasoline engine. (See "Shooting-gallery Equipment.")

Gasoline Engines.—Universal Motor Imports, Ltd., 10 Wilmington Square, Rosebery Ave., London, W. C., England, wants to correspond with manufacturers of engines for aeroplanes.

Gasoline Motor Cars.—South Virginia Beach Corporation, 609 Paul-Gale-Greenwood Bldg., Norfolk, Va., in market April 15 for combined gasoline motor street-railway cars with passenger seats; new or second-hand.

Glass.—See "Reservoir Cover."

Handle Machinery.—See "Woodworking Machinery."

Heaters.—See "Water-works Equipment, etc."

Heating Apparatus.—J. G. Knapp, Mayor, Fitzgerald, Ga., will open bids February 25 for heating plant for school at Fitzgerald; certified check, \$500; plans and specifications on file at office of Mayor, Fitzgerald, or of Atlanta Builders' Exchange, Atlanta, Ga. (See "Schools.")

Heating Equipment, etc.—Bids will be received at office of James Knox Taylor, Supervising Architect, Treasury Department, Washington, D. C., until March 8 for installation of low-pressure steam-heating and ventilating apparatus, etc., for U. S. postoffice, courthouse, etc., building at Atlanta, Ga., in accordance with drawings and specification, copies of which may be had at above office or of superintendent of construction at Atlanta, at discretion of Supervising Architect.

Hoisting Engine.—Mexican United Mining Co., 1022 Witherspoon Bldg., Philadelphia, Pa., wants new or second-hand double-drum double-cylinder engine to hoist 2000 pounds per minute at 400 feet; delivered f. o. b. Santa Ana, Mexico.

Ice Plant.—L. A. Duke, Fort Gaines, Fla., wants prices on new or second-hand ice plant, about five tons capacity, with boiler and engine.

Irrigating Machinery.—See "Pumping Machinery."

Iron.—See "Foundry Equipment."

Iron Posts.—Baltimore (Md.) Board of Awards will receive bids at office of J. Sewell Thomas, City Register, City Hall, until February 10 for furnishing cast-iron electric-light posts and cast-iron subposts, for use under water in swimming-pool at Patterson Park, in accordance with specifications and plans at office Board of Park Commissioners, Madison-avenue entrance to Druid Hill Park; certified check of the bidder for \$200; William S. Manning, general superintendent, Board of Park Commissioners.

Iron Posts.—G. C. Bergener & Bro., 817 Congress Ave., Austin, Texas, in market for wrought-iron hitching posts.

Ironworking Machinery.—A. C. Elder, Watkinsville, Ga., wants prices on ironworking machinery for machine shop.

Levee Construction.—Gus Waterman, chairman Linwood and Auburn Levee Board, Dumas, Ark., will receive bids until February 16 for enlargement of levee of Heckaton, Lincoln county, amounting to about 35,000 yards, and for about 5000 yards at Churchill Place, below South Bend, Ark.; no grubbing necessary.

Levee Construction.—Office Board of Commissioners, Tensas Basin Levee District, Rayville, La. Bids will be received at U. S. Engineer office, Vicksburg, Miss., until February 10 for enlargement of Fulton Lake levee, Chicot county, Arkansas; contents about 200,000 cubic yards; deposit, \$575 cash or certified check to amount of deposit; other information as to location, character of work, terms of payment, blank proposal forms, etc., may be obtained at office of Board of State Engineers, Room 402 Cotton Exchange Bldg., New Orleans, La., or from J. Q. Graves, president, Columbia, La., or H. R. Speed, secretary, Monroe, La.

Lime-hydrating Machinery.—W. B. Talley, West Bldg., Jacksonville, Fla., wants information regarding machinery for hydrating lime.

Lockers.—E. E. Pomeroy, Colonel Fifth Infantry, N. G. of Georgia, 25 Century Bldg., Atlanta, Ga., will receive proposals for about 600 steel lockers to be furnished in place at Armory in Atlanta; about 14 lockers to section; specifications as to kind of metal used, finish, lock, hinges and all details to be furnished; single master keys to be provided for as large a number of lockers as possible; lockers to be ventilated on legs short distance above floors; bidders to state time required to fill order; bids desired upon various sizes and styles, but one size and style will be selected; lockers to have shelves 8 to 10 inches from top, with one ceiling hook in center of shelf, etc. Further information can be obtained from Pomeroy.

Locomotive.—Joseph E. Bowen, 901 Bank of Commerce Bldg., Norfolk, Va., wants 30-ton standard-gauge Climax locomotive.

Locomotives.—See "Gasoline Motor Car."

Looms.—See "Belting Factory Supplies."

Lumber.—F. F. Spencer, superintendent Southern Building & Improvement Co., 619 Century Bldg., Atlanta, Ga., wants prices on long-leaf yellow pine for mill construction.

Lumber.—South Virginia Beach Corporation, 609 Paul-Gale-Greenwood Bldg., Norfolk, Va., in market for 500,000 feet (part or all) cheapest grade flooring; 200,000 feet (part or all) cheap sheathing; same amount cheap weatherboarding.

Machine Tools.—Howe Company, 237 West Main St., Louisville, Ky., wants 14-inch-awing machine lathe, 24 to 30-inch engine lathe, emery wheel with stand, portable forge, 21-inch upright back-gear drill press and milling machine.

Machine Tools.—Box 342, Chattanooga, Tenn., wants No. 1 universal milling machine, No. 1 universal tool grinder, 16-inch or 20-inch shaper, hub key-seater, shafting key-seating machine, 50-ton hydraulic press; 24-inch drill press, plain; small gear-cutting machine, plain; combination punch and shear for 3/4-inch; bolt header up to 1 inch; 8x35 air compressor, steam driven.

Machine Tools.—See "Belting Factory Supplies."

Machine Tools.—Enid Foundry and Machine Shops, Enid, Okla., wants lathes, drills, planer and keyseater.

Marble Baseboard.—Enlor & Skaggs, Miami, Fla., want prices on marble baseboard.

Metal.—See "Reservoir Cover."

Paper-Box Machinery.—Robinson's, Ltd., 523 Pender St., Vancouver, B. C., wants to correspond with manufacturers of machinery for making fancy boxes for toilet soaps, etc.

Park Supplies.—Baltimore Board of Awards, City Hall, Baltimore, Md., will receive bids at office of J. Sewell Thomas, City Register, City Hall, until February 10 for furnishing following materials and supplies and doing following work in accordance with specifications to be seen and obtained at office of Park Board, Madison-avenue entrance to Druid Hill Park: 1—Regrading, constructing catch basins, pipe lines, constructing armored concrete curb, paving Patterson Park Mall, and path along Mount Royal approach and south boundary of Druid Hill Park from North avenue to Robert street, and thence from southeast end of wall, south boundary of Druid Hill Park, to Eutaw place; alternate bids are asked on brick and on asphalt block. 2—Furnishing white lead, linseed oil, tankage and ground bone. Certified check for \$200; William S. Manning, general superintendent, Board of Park Commissioners.

Piping.—Joseph S. Davis, Danville, Va., R. F. D. No. 5, wants piping for kiln for time about 20,000 feet lumber at one time.

Piping.—H. C. Inskeep, manager Hampshire Orchard Co., Romney, W. Va., wants pipes on galvanized pipe.

Piping.—See "Water-works Supplies."

Plumbing Fixtures.—United States Department of Agriculture, office of Secretary, Washington, D. C. Sealed proposals will be received at office of disbursing clerk until February 9 for furnishing material and installing plumbing fixtures in building being erected at No. 216 13th St. S. W., Washington; work to be done as erection of building progresses; specifications and full information furnished upon application to disbursing clerk; bids to be addressed to Secretary of Agriculture in accordance with instructions given on schedule; James Wilson, Secretary.

Pressed Steel or Iron.—See "Clothes-rack Parts."

Pump.—Marionneaux, Hebert & Guidry, Red Eye Plantation, Mark, La., want Heald & Sisco rotary pump, late make, 15-inch suction, 12-inch discharge; second-hand.

Pump.—Bids will be received at office of Morgan Caraway, City Clerk, Muskogee, Okla., until March 1 on 4,000-gallon crank flywheel pump. Specifications will be mailed from office of City Engineer on application. Certified check for \$500.

Pump.—H. C. Inskeep, manager Hampshire Company, Romney, W. Va., wants prices on pump.

Pumping Machinery.—Southern Engineering & Supply Co., No. 220 Avenue D, San Antonio, Texas, wants to represent manufacturers of pumping machinery.

Pumps.—See "Water-works Equipment, etc."

Pumps, etc.—Bids will be received at office of General Purchasing Officer, Isthmian Canal Commission, Washington, D. C., until February 11 for furnishing steam pumps, electric motors, wood-boring machine, tackle

blocks, cast-iron and lead pipe, chain, etc. Blanks and general information relating to Circular No. 493 may be obtained at above office or offices of assistant purchasing agents, 21 State street, New York; Customhouse, New Orleans; 1086 North Point street, San Francisco, Cal.; also from U. S. Engineer office in following cities: Seattle, Wash.; Los Angeles, Cal.; Baltimore, Philadelphia, Pittsburgh, Boston, Buffalo, Cleveland, Cincinnati, St. Paul, Detroit, Milwaukee, Chicago, St. Louis, Chattanooga, Louisville, Mobile and Galveston; Commercial Club, Kansas City; Chamber of Commerce, Quincy, Ill., and Chamber of Commerce and Board of Trade, Tacoma, Wash.; F. C. Boggs, Captain, Corps of Engineers, U. S. A., General Purchasing Officer.

Rail.—H. C. Inskeep, manager Hampshire Orchard Co., Romney, W. Va., wants prices on light rail.

Rails.—Joseph E. Bowen, 901 Bank of Commerce Bldg., Norfolk, Va., wants five miles 40-pound rails.

Rails.—South Virginia Beach Corporation, 609 Paul-Gale-Greenwood Bldg., Norfolk, Va., in market April 15 for two miles relaying steel rails, 40 to 60 pounds, and one to four miles 30 to 50 pound relaying iron rails. Quote prices f. o. b. cars Norfolk.

Railway Equipment.—See "Car."

Refrigerating Machinery.—Southern Engineering & Supply Co., No. 220 Avenue D, San Antonio, Texas, wants to represent manufacturers of refrigerating machinery.

Reservoir Cover.—L. J. Mewborne, City Clerk, Kingston, N. C., wants information and prices on glass or metal cover for reservoir 60 feet in diameter.

Road Construction.—Permanent Road Improvement Commission of Norfolk County, Portsmouth, Va., will receive bids at office of County Clerk until March 1 for construction of macadam road from Norfolk to Great Bridge, Va., according to specifications prepared by P. St. J. Wilson, State Highway Commissioner, Richmond, Va.; certified check for \$1000; specifications and map of route can be inspected at office of County Clerk.

Road Improvements.—Cecil County Commissioners, Elkton, Md., will receive separate bids until February 10 for following road grading and macadamizing: Between Pleasant Hill and Blue Ball, known as Pleasant Hill road, about 2 1/2 miles; between Farmington and Greenhurst, known as Farmington-Greenhurst road, about one mile; between Chesapeake City and St. Augustine, known as St. Augustine road, about two miles; between Maryland-Delaware line and Cecilton, known as Cecilton road, about two miles; certified check in each instance, \$200; plans and specifications at office of County Commissioners at Elkton; proposals to be made on forms furnished by State Geological Survey Commission, to be obtained through its office in Baltimore, Md. W. H. Deshane, president Board County Commissioners; J. H. Terrell, clerk.

Roofing.—South Virginia Beach Corporation, 609 Paul-Gale-Greenwood Bldg., Norfolk, Va., in market April 15 for 500,000 square feet roofing best adapted to salt air.

Safe.—Tuckasee Bank, J. L. Broyles, cashier, Webster, N. C., wants second-hand circular burglar-proof safe, enclosed in fire-proof safe, with room for books, etc.

Sawmill.—South Virginia Beach Corporation, 609 Paul-Gale-Greenwood Bldg., Norfolk, Va., in market April 15 for portable second-hand sawmill. Quote price f. o. b. cars Norfolk.

Sawmill.—C. M. Dunning & Co., Birmingham, Ala., in market for sawmill; 15,000 to 20,000 feet capacity; low price; second-hand; also want veneer outfit.

Sewer Construction.—See "Water-works."

Sewer-system Supplies.—Mayor and City Council, Haskell, Texas, will receive bids until February 15 for purchase of material necessary in construction of system of sewers and water-works, which will include standard vitrified salt-glazed sewer tile and fittings, manholes, frames and covers, etc. (See "Water-works Equipment, etc.")

Sheet Metal.—Powers Fountain Co., Montgomery, Ala., wants to correspond with sheet-metal workers.

Shooting-gallery Equipment.—Peacock's Iron Works, Selma, Ala., wants shooting-gallery outfit, with three sets traveling animals, birds, etc.; to be driven by gasoline engine; portable.

Street Sweeper.—Builders' Supply Co., 109 South Cherokee St., Muskogee, Okla., wants catalogues and prices on street sweeper for brick and asphalt pavement.

Tanks.—Powers Fountain Co., Montgomery,

Ala., wants to correspond with manufacturers of soda tanks.

Tapes, etc.—Fayette Manufacturing Co., Suite 412 Security Trust Co. Bldg., Lexington, Ky., wants tape, etc., for manufacture of abdominal supporters.

Telephone Equipment.—See "Electrical Supplies."

Tiling.—Enloe & Skaggs, Miami, Fla., want prices on tiling for \$6000 office building.

Tool Machinery and Tools.—Eugene Pilegaard, Lobkowitz Platz 1, Vienna, Austria, wants to correspond relative to agency for tools and tool-making machinery.

Veneer.—Hardwood Manufacturing Co., 620 East Washington St., Greensboro, N. C., wants to buy birch veneering; sawed; 3-16-inch and 1-30-inch thick.

Veneer Machine.—C. M. Dunning & Co., Birmingham, Ala., in market for second-hand veneer outfit.

Ventilating Apparatus.—See "Heating Equipment, etc."

Viaduct Construction.—Sealed proposals addressed to Joint Council Committee on Streets and Sewers will be received at City Engineer's office, Lynchburg, Va., until February 15 for construction of reinforced concrete viaduct; entire work to be let in one contract; certified check, \$1000. Approximate quantities are 1600 cubic yards excavation, 230 tons steel bars, 3700 cubic yards concrete, 1040 square yards brick pavement. Plans and specifications and forms of proposals and contracts obtained at office of H. L. Shaner, chief engineer, Lynchburg, upon deposit of \$25.

Water Feeder.—See "Boiler and Feeder."

Water-works.—G. W. Cavanaugh, Town Clerk, Sebring, Ky., will receive bids until February 15 for constructing complete system of water-works; work will comprise one 60,000-gallon steel tank, small frame building to contain boiler, two pumps, etc., distribution pipe line system; certified check for 5 per cent. of amount of each bid on any part of work, and in no case less than \$50 enclosed; all checks payable to C. H. Ramsey, Mayor; plans, etc., at office of Town Clerk.

Water-works.—City Council, Itta Bena, Miss., will receive bids until February 15 for

material and labor for constructing complete water-works and sewer system. Synopses of specifications mailed upon application to Xavier A. Kramer, consulting engineer, Magnolia, Miss. Plans and specifications on file at Itta Bena and with engineer.

Water-works Equipment, etc.—Mayor and City Council, Haskell, Texas, will receive bids until February 15 for purchase of all material necessary in construction of system of water-works and sewers, which will include return tubular boilers, duplex pumps, boiler-feed pumps, heaters, cast-iron pipe, hydrants and valves; also standard vitrified salt-glazed sewer tile and fittings, manholes, frames and covers. O'Neill Engineering Co., M. Griffin O'Neill, president, Dallas, Texas, is in charge.

Water-works Supplies.—Bids will be received by City of Sherman, Texas, until February 15 at office of City Secretary for following material, or any part thereof: 170 feet 6-inch cast-iron pipe, 2100 feet 4-inch cast-iron pipe, 50 fire hydrants, three 6-inch plugs. All material to conform to New England Water-works Association standard specification for cast-iron pipe; bidders to state delivered price and state shortest time of delivery. J. B. Irvine, Chairman Water and Light Committee.

Weaving Machinery.—See "Belting Factory Supplies."

Wood-button Machinery.—See "Button Machinery, etc."

Wood-pulp Machinery.—P. D. De Pool, Box 1069, Havana, Cuba, wants information and prices from manufacturers on wood-pulp machinery.

Woodworking Machinery.—A. C. Elder, Watkinsville, Ga., wants prices on wood-working machinery.

Woodworking Machinery.—See "Box Machinery."

Woodworking Machinery.—Marcus Erwin, Asheville, N. C., wants to correspond with manufacturers of machinery to make pins, crossarms, handles and spokes.

Woodworking Machinery.—Box 342, Chattanooga, Tenn., wants wood mortiser up to 2-inch, and dimension planer 18-inch by 18-inch or 24-inch by 24-inch.

INDUSTRIAL NEWS OF INTEREST

TRADE NOTES.

Wants Kaolin Property.

The Chas. R. Fife Co., 424 Pierce Bldg., St. Louis, Mo., wants to buy kaolin property. This company invites data as to acreage, development, samples and price on any property offered.

New Agency for Ball Engines.

The Ball Engine Co. of Erie, Pa., has appointed a general representative for Kentucky, Tennessee and Southern Indiana. This agency is held by the Davis-Urwick Company, 341 West Main St., Louisville, Ky.

Peck-Hammond Heating Equipments

Many plants have been installed in the South by the Peck-Hammond Company, manufacturer of steam and hot-water heating and ventilating apparatus, etc. This company is distributing, as a reminder of its facilities, a wall thermometer for home or office use. It guarantees all its installations; main office at Cincinnati, Ohio.

The Ball Engine Co.

The Ball Engine Co., Erie, Pa., in order to serve its increasing clientele in the South, has established an office in the Empire Building, Atlanta, Ga., with B. C. Fennell, M. E., as sales manager. The many installations of Erie Ball engines in the electric-light and power plants of the South attest the favor in which this engine is held.

Southern Engineering & Supply Co.

The Southern Engineering & Supply Co. of San Antonio, Texas, has established its offices in the Henry Terrell Building, at 220 Avenue D, and is now prepared to undertake contracts. The company will act as consulting and contracting engineer generally, making a specialty of pumping and irrigating machinery and small lighting and refrigerating plants. Manufacturers desiring representation are invited to send catalogues and correspond relative to terms. Messrs. W. F. Hannes and W. E. G. Roloff compose the company.

Demand for Mechanical Stokers.

The Westinghouse Machine Co. of Pittsburg, Pa., reports a continued and increased demand for the Roney mechanical stokers, which the company manufactures. During

the past three months the company has taken many orders for the equipments, including 17 outfits for Government and State institutions. The Public Service Corporation of New Jersey has adopted the Roney stoker after competitive tests with other types. It has ordered 15 Roney outfits. Various other prominent corporations have also ordered Roney equipments for installation in their boiler plants.

Raymond Concrete-Pile System.

In order to afford engineers, architects and others interested in foundation construction an opportunity of familiarizing themselves at first hand with its methods, the Raymond Concrete Pile Co. of New York and Chicago will give at the coming Chicago cement show working demonstrations of its system of making and placing concrete piles. The Raymond system consists of placing a sheet-steel shell in the soil by means of a collapsible steel core, withdrawing the core and thereupon filling the shell, previously subjected to a searching examination, with concrete. The entire operation will be shown at the Raymond booth. A model pilerdriver will be employed in placing the shells.

The Indian Refining Co.

One of the prominent independent manufacturers of petroleum products is the Indian Refining Co. of Cincinnati, Ohio. This company had its main offices at Georgetown, Ky., until last summer, when it removed to the First National Bank Building at Cincinnati. It owns and controls valuable oil lands and numerous active wells in Kentucky and Illinois, together with pipe lines, 500 tank cars for transporting products, large refineries at Georgetown, Ky., East St. Louis and Lawrenceville, Ill., and other facilities for economical production, manufacturing and handling. The Indian trade throughout the South and West is increasing steadily and every effort is made to maintain the high reputation already established. The Indian Refining Co. offers every known form of petroleum and its derivatives to consumers through the medium of independent jobbers.

Maryland Railway & Electric Supply Co.

The Maryland Railway & Electric Supply Co. will establish a demonstrating salesroom

[Continued on Page 83.]

PROPOSALS INVITED FOR CONSTRUCTION WORK.

Details regarding construction work, proposals invited, etc., noted in the following list, will be found in this and recent issues of the MANUFACTURERS' RECORD and the DAILY BULLETIN OF THE MANUFACTURERS' RECORD.

This list includes only items containing specifications for bids. Many additional opportunities for construction and machinery contracts can be noted in the Construction Department.

* Indicates that the item has appeared in our "Machinery, Proposals and Supplies Wanted" department.

Date to open bids.
(When date is
not given it has
not been fixed.)

BRIDGES, CULVERTS, VIADUCTS.

	Published in Daily Bul- letin.	Manu- facturers' Record.
*Six Steel Bridges, Abbeville, S. C.	Nov. 5	Nov. 12
*Culverts, Barton Heights, Va.	Dec. 1	Dec. 3
Concrete Viaduct, Houston, Texas.	Dec. 7	Dec. 10
Five Bridges, Dallas, Texas.	Dec. 15	Dec. 17
*Six Bridges, Paris, Ark.	Dec. 19	Dec. 24
*River Bridge, Cuero, Texas.	Jan. 16	Jan. 21
*Reinforced Concrete Viaduct, Lynchburg, Va.	Jan. 23	Feb. 4
Causeway, estimated cost, \$1,400,000, Galveston, Tex.	Jan. 29	Feb. 4
*Steel Bridge, Duncannon, Va.	Jan. 30	Feb. 4
Seventeen Steel Bridges, Tulsa, Okla.	Jan. 30	Feb. 4
Highway Bridge, Charlottesville, Va.	Feb. 3	Feb. 4

ELECTRIC LIGHT AND POWER PLANTS.

*Bristol, Tenn.	Nov. 2	Nov. 5
Chillicothe, Mo.	Dec. 4	Dec. 10
*Norcross, Ga.	Dec. 7	Dec. 10
*Water-power-electric Development, White Spring, Fla.	Dec. 8	Dec. 10
*Bradshaw Cooperage Co., Burkeville, Va.	Jan. 6	Jan. 14
*City of Kiowa, Okla.	Jan. 12	Jan. 14
City of Terrell, Texas.	Jan. 12	Jan. 14
*Municipal Plant, Terrell, Texas.	Jan. 19	Jan. 21
Municipal Plant, Houma, La.	Jan. 25	Jan. 28

MISCELLANEOUS CONSTRUCTION WORK.

*Levee Work, Waco, Texas.	Nov. 13	Nov. 19
Wharves, New Orleans, La.	Dec. 5	Dec. 10
*Heating Plant, Sumter, S. C.	Dec. 8	Dec. 10
*Drainage Ditches, Velasco, Texas.	Jan. 6	Jan. 14
*Levee Enlargement, Chicot county, Arkansas.	Jan. 29	Feb. 4
*Levee Enlargement, South Bend, Ark.	Jan. 30	Feb. 4

ROAD AND STREET IMPROVEMENTS.

*Vitrified Brick, etc., Ashland, Ky.	Oct. 30	Nov. 5
Vitrified Brick, Ada, Okla.	Dec. 7	Dec. 10
Brick Paving, etc., Clinton, Mo.	Dec. 11	Dec. 17
Boulevard, Anniston, Ala.	Dec. 17	Dec. 24
Street Improvements, St. Louis, Mo.	Jan. 15	Jan. 21
Asphalt, etc., Dallas, Texas.	Jan. 16	Jan. 21
*Concrete Sidewalks, Lake Village, Ark.	Jan. 22	Jan. 28
Concrete Sidewalks, Houma, La.	Jan. 25	Jan. 28
*Macadam Road, Mooreville, N. C.	Jan. 27	Jan. 28
*Pave, etc., Greenwood, S. C.	Jan. 26	Jan. 28
*Concrete and Macadam, Oxford, Miss.	Jan. 26	Jan. 28
*Macadamized Road, Elkton, Md.	Feb. 1	Feb. 4
Cement Sidewalks, etc., Opelousas, La.	Feb. 1	Feb. 4

SEWER CONSTRUCTION.

*Sanitary Sewers, Winston, N. C.	Sept. 19	Sept. 24
*Drainage, etc., San Antonio, Texas.	Oct. 23	Oct. 29
Sewer System Surveys, Clinton, S. C.	Dec. 8	Dec. 10
Municipal System, Seymour, Texas.	Dec. 7	Dec. 10
Sewers, Park, Tenn.	Dec. 11	Dec. 17
Sanitary Sewer, Oklahoma City, Okla.	Dec. 18	Dec. 24
District Sewers, Park, Tenn.	Dec. 21	Dec. 24
Storm Drainage, Mobile, Ala.	Dec. 24	Dec. 31
*Sanitary System, Purcell, Okla.	Jan. 6	Jan. 14
Municipal System, Clearwater, Fla.	Jan. 19	Jan. 21
*Sanitary Sewers, Baltimore, Md.	Jan. 21	Jan. 28
*Sewers, Louisville, Ky.	Jan. 21	Jan. 28
*Sanitary Sewers, Greymont, Ala.	Jan. 22	Jan. 28
*Sewers, Atlanta, Ga.	Jan. 26	Jan. 28
*Sewers, etc., Haskell, Texas.	Jan. 29	Feb. 4
*Sewer System, Itta Bena, Miss.	Jan. 30	Feb. 4

WATER-WORKS.

*System, Marcelline, Mo.	Sept. 21	Sept. 24
*Municipal System, Uniontown, Ky.	Nov. 19	Nov. 26
Municipal System, Seymour, Texas.	Dec. 7	Dec. 10
Water Mains, Huntsville, Ala.	Dec. 8	Dec. 10
*City of Kiowa, Okla.	Jan. 12	Jan. 14
Municipal System, Clearwater, Fla.	Jan. 19	Jan. 21
*Municipal System, Haskell, Texas.	Jan. 29	Feb. 4
*Municipal System, Itta Bena, Miss.	Jan. 30	Feb. 4
*Municipal System, Sebree, Ky.	Feb. 2	Feb. 4

APARTMENT-HOUSES.

Herbert E. Green, Baltimore, Md.	Dec. 24	Dec. 31
----------------------------------	---------	---------

BANK AND OFFICE BUILDINGS.

National City Bank, Birmingham, Ala.	July 28	July 30
First National Bank, Coeburn, Va.	Aug. 12	Aug. 13
Middletown Savings Bank, Middletown, Md.	Aug. 24	Aug. 27
C. P. McKinney, Ripley, Tenn.	Oct. 29	Nov. 5
Manhattan Sav. Bank & Trust Co., Memphis, Tenn.	Nov. 11	Nov. 12
Southern Life Insurance Co., Fayette, N. C.	Nov. 21	Nov. 26
First National Bank, Hendersonville, N. C.	Nov. 19	Nov. 26
Whitney Central National Bank, New Orleans, La.	Nov. 25	Dec. 3
Guarantee Trust & Banking Co., Atlanta, Ga.	Nov. 27	Dec. 3
Franklin Savings Bank, Frederick, Md.	Nov. 30	Dec. 3
First National Bank, Roanoke, Va.	Dec. 15	Dec. 17
P. H. Swearingen, San Antonio, Texas.	Dec. 16	Dec. 17
Miami, Fla.	Jan. 30	Feb. 4
Bryan, Texas.	Feb. 2	Feb. 4

Date to open bids.
(When date is
not given it has
not been fixed.)

APARTMENT-HOUSES.

Harbour & Bass, Oklahoma City, Okla.	Jan. 13	Jan. 14
First National Bank, Prestonburg, Ky.	Jan. 13	Jan. 14
Union Bank & Trust Co., Nashville, Tenn.	Jan. 15	Jan. 21

CHURCHES.

First Baptist Church, Paris, Ky.	July 13	July 16
Hopkinsville, Ky.	Aug. 19	Aug. 30
Green Cove Springs, Fla.	Sept. 23	Sept. 24
Presbyterian Church, Whitman, Ga.	Nov. 2	Nov. 5
Gillespie Avenue Baptist Church, Knoxville, Tenn.	Dec. 3	Dec. 10
Conway, Ark.	Dec. 19	Dec. 24
Presbyterian Church, Gainesville, Texas.	Dec. 29	Dec. 31
M. E. Church, Okmulgee, Okla.	Jan. 5	Jan. 7
First Presbyterian Church, Chattanooga, Tenn.	Jan. 14	Jan. 21
Kaufman, Texas.	Jan. 21	Jan. 28
Montevallo, Ala.	Jan. 25	Jan. 28
St. Petersburg, Fla.	Jan. 29	Feb. 4
Brownwood, Texas.	Feb. 2	Feb. 4

COURTHOUSES.

Martinsburg, W. Va.	July 15	July 16
Additions, Towson, Md.	Dec. 4	Dec. 10
Fitzgerald, Ga.	Dec. 22	Dec. 24
Remodeling; \$75,000; Nashville, Tenn.	Jan. 8	Jan. 14
Boone County; \$35,000; Harrison, Ark.	Jan. 9	Jan. 14
Remodeling; \$20,000; Christiansburg, Va.	Jan. 11	Jan. 14
Stanford, Ky.	Jan. 11	Jan. 14
Annex; Welch, W. Va.	Jan. 11	Jan. 14
Remodeling, Christiansburg, Va.	Jan. 14	Jan. 21

GOVERNMENT AND STATE BUILDINGS.

Barracks, Fort Moultrie, S. C.	Dec. 4	Dec. 10
U. S. Postoffice, Salisbury, N. C.	Jan. 12	Jan. 14
Stable, Fort Myer, Va.	Jan. 13	Jan. 14
U. S. Postoffice, Greenville, Miss.	Jan. 16	Jan. 21
Officers' Quarters, Fortress Monroe, Va.	Jan. 19	Jan. 21
U. S. Postoffice, Roanoke, Va.	Jan. 21	Jan. 28
U. S. Postoffice, Gadsden, Ala.	Jan. 25	Jan. 28
U. S. Weather Bureau, Abilene, Texas.	Jan. 27	Jan. 28

HOTELS.

Coleman-Fulton Pasture Co., Gregory, Texas.	Sept. 9	Sept. 10
Beeville, Texas.	Nov. 25	Dec. 3
Corpus Christi, Texas.	Nov. 25	Dec. 3
El Reno, Okla.	Jan. 30	Jan. 21

MISCELLANEOUS STRUCTURES.

Infirmary, Catlettsburg, Ky.	Oct. 21	Oct. 22
County Home, Independence, Mo.	Dec. 7	Dec. 10
Jail, Waycross, Ga.	Dec. 22	Dec. 24
Clubhouse, Harrisburg, Texas.	Dec. 23	Dec. 24
Jail, Fitzgerald, Ga.	Dec. 24	Dec. 31
Plans only, Orphanage, Winston-Salem, N. C.	Jan. 11	Jan. 14
Jail, Fitzgerald, Ga.	Jan. 18	Jan. 21
Jail, Madisonville, Tenn.	Jan. 18	Jan. 21
Pythian Home, Lexington, Ky.	Jan. 23	Jan. 28
Hospital, Nashville, Tenn.	Jan. 22	Jan. 28
Sanitarium, Arlington, Texas.	Feb. 3	Feb. 4

MUNICIPAL BUILDINGS.

City Stockade, Tampa, Fla.	Nov. 9	Nov. 12
Police Station, Anacostia, D. C.	Dec. 1	Dec. 3
Comfort Station, St. Louis, Mo.	Dec. 26	Dec. 31
City Hall, etc., Nacogdoches, Texas.	Jan. 13	Jan. 14
Hall and Hospital, Shawnee, Okla.	Jan. 16	Jan. 21
Fire Department, etc., Park, Tenn.	Jan. 30	Feb. 4

SCHOOLS.

Nixon, Texas.	Sept. 23	Sept. 24
Hartshorne, Okla.	Nov. 28	Dec. 3
College Building, Stillwater, Okla.	Dec. 21	Dec. 24
Moorhead, Miss.	Dec. 22	Dec. 24
Williamsburg, Ky.	Jan. 4	Jan. 7
St. Augustine, Fla.	Jan. 12	Jan. 14
State Normal School, Weatherford, Okla.	Jan. 13	Jan. 14
Richmond, Ky.	Jan. 16	Jan. 21
Port Arthur, Texas.	Jan. 16	Jan. 21
Shawnee, Okla.	Jan. 16	Jan. 21
Raleigh, N. C.	Jan. 25	Jan. 28
Thomson, Ga.	Jan. 25	Jan. 28
Athens, Tenn.	Jan. 26	Jan. 28
Marlow, Okla.	Jan. 27	Jan. 28
Weatherford, Okla.	Jan. 27	Jan. 28
Plans Wanted, Cullman, Ala.	Jan. 28	Feb. 4
Plans Wanted, Red Star, W. Va.	Jan. 28	Feb. 4
Fitzgerald, Ga.	Jan. 29	Feb. 4
Plans Wanted, Yoakum, Texas.	Feb. 1	Feb. 4
Charleston, W. Va.	Feb. 2	Feb. 4
Ruston, La.	Feb. 2	Feb. 4

THEATERS.

WAREHOUSES.

State Warehouse, Baltimore, Md.	Dec. 15	Dec. 17
Reinforced Concrete Structure, New Orleans, La.	Dec. 23	Dec. 24
Cost \$25,000; Dallas, Texas.	Jan. 12	Jan. 14

[Continued from Page 82.]

In Baltimore, Md., in conjunction with the Witherbee Igniter Co. of New York, where both companies' principal specialties can be seen in operation after February 1. The Maryland Railway & Electric Supply Co. will show Spencer turbine vacuum cleaners. Ofte hot-water gas radiators, New Method gas ranges, Monarch metal polishes and general electric and automobile supplies. The Witherbee Igniter Co. will exhibit its stor-

age-battery igniters, magnetos, spark plugs, timers and general automobile ignition specialties. A departure from the usual custom is that everything handled will be shown in actual operation, in order that prospective customers may see exactly what the articles desired will do. It is claimed this has not been attempted in Baltimore before, and should attract unusual attention. The railway supply department, which handles general supplies for both steam and electric

railways, will be continued as heretofore. The general offices of the Maryland Railway & Electric Supply Co. will be moved from 694 Continental Building to the new location, 345 North Charles street, Baltimore, Md. Branch offices are also maintained at 1629 Candler Building, Atlanta, Ga.; 312 Tyler Building, Louisville, Ky., and 617 14th street N. W., Washington, D. C.

The Southern Electrical Exposition.

In preparing for the Southern Electrical and Industrial Exposition, which will be held in the Armory, Louisville, Ky., on April 12-14, a party of Louisville men visited the Chicago Electrical Show on January 21 and 22. Elaborate preparations are in progress for the Louisville exposition, which promises to be a notable success. The Louisville party went to Chicago to get ideas and to interest exhibitors. It was entertained by the Chicago Association of Commerce and Samuel Insull, president of the Electrical Trades Exposition Co.

In the party were F. M. Sackett, president of the Louisville Lighting Co.; R. E. Hughes, J. V. Beckmann, Arthur E. Hopkins, L. S. Streng, A. T. Macdonald, Fred W. Kersker, Henry Besten, C. L. Hausman, H. B. Hewett, B. B. Davis, T. R. Lindsey, Rush C. Watkins, W. A. Bailey and others of Louisville and M. J. Insull of New Albany, Ind.

TRADE LITERATURE.

Hungerford & Terry Water Filters.

People who are interested in the filtration of water for any purpose will find timely data presented in the illustrated booklet issued by Hungerford & Terry, filtration engineers, Pennsylvania Bldg., 15th and Chestnut Sts., Philadelphia, Pa. The firm acts as engineer for and manufactures pressure and gravity filters, continuous and intermittent water softeners, plants for the removal of iron, and Burtonizing apparatus for breweries.

Dallett Air Compressors.

Thos. H. Dallett catalogue No. 100 presents an illustrated description of the new line of air compressors manufactured by Thos. H. Dallett & Co., York and 23d Sts., Philadelphia, Pa. These compressors are designed with the single object of producing the most perfect machine possible. Their massive construction adapts them to the heaviest and most severe service, while special attention has been given to securing the highest efficiency in operation.

Murphy Electricity Rectifier.

The increased use of the alternating current has created a demand for an efficient and reliable means of transforming to direct current at reasonable cost and maintenance. This fact makes it timely to mention that the Murphy electricity rectifier is offered for transforming purposes, and the invention is described in detail, the text being accompanied by photographic views and diagrams, in a booklet now being distributed. This rectifier has no vacuum tubes, no electrolyte, no inductance and no resistance. It is manufactured by the Murphy Electricity Rectifier Co., Rochester, N. Y.

Inlaid Slate for Flat Roofs.

A current booklet presents interesting data regarding a roofing material that will appeal to progressive architects, building contractors and owners of buildings. It describes and illustrates inlaid slate for flat roofs. The slate is genuine natural slate sawed into small squares, closely set and embedded into a layer of high-melting asphalt or regular roofing felt. It is made in units or sections measuring one and one-half square feet and placed in small crates for shipment. Inlaid slate is manufactured by the Inlaid Slate Co. of Pen Argyl, Pa. Frank A. Knowles & Co., 398 North Holliday St., Baltimore, Md., are agents for the South and are to be addressed for further information.

The New American Turbine.

The New American turbine is fully described and illustrated in a new 80-page catalogue issued by the Dayton Globe Iron Works Co., manufacturer of the turbine, Dayton, Ohio. This publication presents, besides descriptions of the machine, tables of power of the various types and other tables of value to those interested in water-power development. For 50 years the company has been engaged in designing, constructing and operating water-wheel machinery, and it has established a high reputation for the economy and efficiency of its equipments. Anyone interested in the development of water-power is invited to correspond with the company, which will promptly furnish sketches, estimates or any other information that may be desired.

Modern Machinery for Logging.

Efficient labor-saving machinery for logging purposes is an important factor in the development of timber properties. One is reminded of this when examining the pages of Surry Parker's catalogue, which describes and illustrates Mr. Parker's inventions. These include labor-saving machinery for handling logs, excavating and dredging machinery, engines for driving piles, hoisting machinery, etc. Machinery of the Parker type has been in use for many years in the South, and some of the most exacting purchasers of logging machinery have selected his equipments in preference to any other. The illustrations in the catalogue are all photographic views of machines built and in actual operation. Surry Parker has his main offices and plant at Pine Town, N. C.

Pertaining to Instrument Questions.

"The Foxboro Recorder" is the title of a publication which will contain a series of papers on the manufacture and use of instruments. Dated January, the first of the series has been issued, and every number will contain brief and frank information regarding the organization, products or policy of the Industrial Instrument Co., sales company for the Standard Gauge Manufacturing Co., and sales agent for the Standard Electric Time Co., which enterprises the Industrial Instrument Co. controls by owning their entire capital stock. Announcements relative to this enterprise were made some weeks ago, when organization was effected. Main offices at Foxboro, Mass.; New York office at 50 church street; Chicago office at 752 Monadnock Bldg.

The Deming Spray Pumps.

The Deming spray pumps, nozzles and appliances were perfected after study, experiment and consultation with agricultural experiment station scientists and practical fruit growers who understand the practice of spraying. The Deming apparatus is described and illustrated in a new catalogue now being distributed by the Deming Company of Salem, Ohio. This company's catalogue contains a complete 12-page spraying chart, shows sectional and detail views of pumps and illustrates many of them in action. The company also manufactures a complete line of hand and windmill power pumps, hydraulic rams, triplex and deep-well power pumps, etc. Its spray pumps can be used to advantage not only for agricultural purposes, but also for whitewashing in mills, factories and other buildings.

The Ransom Hollow Dam.

Those interested in dam construction will find timely data for their consideration in the illustrated pamphlet describing the Ransom hollow dam. This dam is illustrated by photographs and reproductions of actual working drawings of the salient scientific principles involved. It is constructed of concrete and steel, and is claimed to cost only from one-half to two-thirds as much as any properly constructed solid dam of masonry or concrete. It is not subject to the dangers of upward pressure or sliding on its base or overturning, and in order to prevent it being crushed by any superincumbent weight the factor of safety of the deck is always made amply large, and the walls that intersect and make up the interior are constructed thick enough to withstand 16 times the pressure that may come upon it. The Hydraulic Properties Co., 144 Westminster St., Providence, R. I., constructs dams of the Ransom pattern either on the basis of cost-plus-fixed-sum, lump sum, or paid royalty, as best suits the requirements of patrons.

The Miles Concrete Machinery.

One of the classes of machinery in large demand at present is that for manufacturing concrete blocks and other concrete products. The Miles Manufacturing Co., Jackson, Mich., has established a reputation for its design of concrete machinery, and is issuing an illustrated descriptive booklet for 1909. In this booklet the company says: "The information contained herein, we believe, is such that will be of interest to those interested in the various branches of the concrete industry. Our aim is to supply equipment of superiority at reasonable prices. The machinery, as listed, is offered as the most modern, most perfect in construction, and with the view of assisting purchasers to keep up to date and have the same as economical workers for them with but a nominal investment. We especially request that the matter describing our new improved No. 5 building-block machines be reviewed carefully. For economy and general principles for making the best stone they are unsurpassed. It costs no more to install one of these thoroughly adjustable machines than it does for the one-

size block outfit that is nothing but a source of expense on account of the limited range of work. Concrete stone is in demand, and the size and style of building is what must govern the block entirely. Our many satisfied customers in the United States and foreign countries bespeak our success and the merit of our products."

The Corbett Supply Co.

One of the most complete catalogues of general mill supplies published recently is that of the Corbett Supply Co., 143 North Warren St., Trenton, N. J. It contains over 500 six-inch pages of illustrations and brief descriptions of general mill supplies—piping, fittings, valves, tanks, gauges, indicators, ventilators, cleaners, rollers, gaskets, hose and couplings, blowers, tools, wrenches, pipe machines, twist drills, milling cutters, shovels, belting, pulleys, etc., manufactured by the best-known companies in the United States. Managers of mills, factories, mines, power plants and other industrial enterprises will find the Corbett catalogue a volume that will enable them to readily select high-grade supplies and be assured of prompt shipments, as the Corbett Supply Co. keeps large stocks ready for forwarding, or where this is not feasible, is prepared to insure shipments direct from manufacturers. An alphabetical index is presented in order to enable purchasers to find promptly the article on which they require information and prices. The Corbett catalogue is bound in cloth.

FINANCIAL NEWS

The MANUFACTURERS' RECORD invites information about Southern financial matters, items of news about new institutions, dividends declared, securities to be issued, openings for new banks, and general discussions of financial subjects bearing upon Southern matters.

Review of the Baltimore Market.

Office MANUFACTURERS' RECORD,

Baltimore, Md., February 3.

Business was active in the Baltimore stock market during the past week and prices were generally steady. The apparent decline in some of the bonds is due to the following (since February 1): The new rule of the Baltimore Stock Exchange providing that all bonds shall be sold "and interest"—that is, the interest to be added to the figure at which the sale is made.

In the trading United Railways trust certificates sold at 10; the income bonds, 51½ to 51; the funding 5s from 78½ to 79, prior to February 1, and afterwards from 78½ to 78½, these being affected by the new rule; United Funding scrip, 79 to 78½; United 4s, 85½ to 85½, and 84½; United Light & Power 4½s, 93; Consolidated Gas, Electric Light & Power common, 32; Consolidated Gas, 102½ to 102; do. 5s, 111½; do. 4½s, 94½ to 94½; Seaboard Company common, 13½ to 13½; do. second preferred, 24½ to 24; Seaboard 4s, 65½ to 64½, reacting to 65½; do. three-year 5s, 96½ to 97½ and 95 to 96; do. ten-year 5s, 97½ to 95½, reacting to 96; Mount Vernon-Woodberry Cotton Duck 5s, 79½ to 79½ and 77½ to 77½; G.-B.-S. Brewing firsts, 44½ and 42½ to 42.

Bank stocks sold as follows: Merchants', 169½; Exchange, 164½; Union, 121; Citizens', 38; Marine, 41; Mechanics', 30½ to 29½; First National, 140½ to 141; Howard, 12½.

Maryland Casualty was traded in from 86 to 86½; Fidelity & Deposit, 149½ to 149; Mercantile Trust, 140 to 138, reacting to 139; Union Trust, 68; American Bonding, 56; International Trust, 135; United States Fidelity, 109.

Other transactions were as follows: Consolidation Coal, 91 to 92½; Houston Oil common, 9½ to 10, reacting to 9; Atlantic Coast Line 4s, 97 to 96½, reacting to 96½; do. new 4s, certificates, 81½ to 82; do. Connecticut 5-20s, 86½ to 87½; do. do. 5s, certificates, 103; Atlantic Coast Line of Connecticut stock, 248; Anacostia & Potomac 5s, 103½ to 104; do. guaranteed, 105½ to 105; Charleston & Western Carolina 5s, 108½ to 109; Detroit United 4½s, 81½ to 82; Georgia, Carolina & Northern 5s, 105 to 105½; Memphis Street Railway 5s, 95½; Baltimore City 4s, 1920, 104; do. 3½s, 1930, 100½ to 101; do. 5s, 1916, W. L., 108½ to 108; do. do. do., F. L., 107; do. 3½s, 1980, 95 to 93½; do. 4s, 1954, 105½; do. 3½s, 1928, 101; do. do., 1940, 101; do. do., 1945, 101; Alabama Consolidated Coal & Iron 5s, 84½; Baltimore Electric 5s,

stamped, 87 to 86½, last sale at 86½; North. Cent. Rwy. stock, 105½ to 104½, last sale at 105; Charleston Consol. Electric 5s, 89½ to 87½; Central Railway 6s, 101½; Lexington Railway 5s, 96 to 98; West Virginia Central 6s, 103 to 103½; Norfolk Railway & Light 5s, 95½ to 97; Western Maryland Railroad stock, 10½ to 12; Cabin Run Coal, 50; Merchants & Miners' Transportation Co., voting trust, 72½; Atlanta Consolidated Street Railway 5s, 105 to 105½; Georgia & Alabama Consolidated 5s, 103½; Norfolk Street Railway 5s, 106½; Coal & Iron Railway 5s, 103½; Georgia Southern & Florida common, 21½; Virginia Midland second, 105½; Baltimore Brick 5s, 72; City & Suburban 5s, Baltimore, Md., 108½; do. Washington, 103½ to 103½; Maryland Steel 5s, 102½; Virginia-Carolina Chemical 5s, 35; Frederick Turnpike, 3; Reisterstown Turnpike, 3½.

SECURITIES AT BALTIMORE.

Last Quotations for the Week Ended February 3, 1909.

Railroad Stocks.	Par.	Bid.	Asked.
Atlantic Coast of Conn.	100	247	255
Georgia Sou. & Fla.	100	99	101
Georgia Sou. & Fla. 1st Pfd.	100	92	95
Georgia Sou. & Fla. 2d Pfd.	100	67	70
Seaboard Company Common	100	13	13½
Seaboard Company 2d Pfd.	100	24	25
United Rys. & Elec. Co.	50	9½	10½

Bank Stocks.	Par.	Bid.	Asked.
Citizens' National Bank	10	38	40
Farmers & Mer. Nat. Bank	40	48	50
First National Bank	100	141	146
Merchants' National Bank	100	169	171
National Bank of Baltimore	100	121	125
National Exchange Bank	100	121	125
National Howard Bank	100	12½	13
National Marine Bank	30	41	43
National Mechanics' Bank	10	29½	31
Nat. Union Bank of Md.	100	120	121
Old Town Bank	10	11½	12
Third National Bank	100	115	117
Western National Bank	20	35	36

Trust, Fidelity and Casualty Stocks.	Par.	Bid.	Asked.
Colonial Trust	50	27½	28½
Fidelity & Deposit	50	143	145
Fidelity Trust	100	205	207
International Trust	100	130	133
Maryland Casualty	25	86	86½
Maryland Trust	100	60	65
Maryland Trust Pfd.	100	94	95
Mercantile Trust & Deposit	50	137	138
Union Trust	50	70	71
U. S. Fidelity & Guaranty	100	109	110

Miscellaneous Stocks.	Par.	Bid.	Asked.
Ala. Con. Coal & Iron Pfd.	100	70	80
Con. Cotton Duck Common	50	6¼	7¼
Con. Cotton Duck Pfd.	50	22½	24
Con. Gas, Elec. Lt. & Pow. Pfd.	100	78	80
Consolidation Coal	100	92½	95
G.-B.-S. Brewing Co.	100	2	3½
Georges Creek Coal	100	83	85

Railroad Bonds.	Par.	Bid.	Asked.
Atlanta & Birmingham 4s	100	80½	81
Atlantic Coast Line 1st 4s, 1952	100	96½	97
Atlantic Coast Line new 4s, Cfs.	100	81½	82
At. Coast Line (Conn.) 5s, Cfs.	100	103	104
At. Coast Line (Conn.) 4s, Cfs.	80	80	80
At. Coast Line (S. C.) 4s, 1918	80	80	80
At. Coast Line, L. & N. Col. Tr. 4s	80	80	80
Carolina Central 4s, 1949	100	92½	94
Central of Georgia Con. 5s	100	98½	99
Charlotte & West. Caro. 5s, 1946	100	107½	109
Charlotte, Col. & Aug. 1st 5s, 1910	110	112	112
Georgia & Alabama 5s, 1945	100	102½	103½
Georgia, Car. & North. 1st 5s, 1929	105	106½	107
Georgia South. & Fla. 1st 5s, 1945	109	109	109
Maryland & Pennsylvania 4s, 1951	93	93	93
Petersburg Class A 5s, 1926	108½	108½	108½
Potomac Valley 1st 5s, 1941	105½	107	107
Richmond & Dan. Gold 6s, 1915	108½	109½	109½
Savannah, Fla. & West. 5s, 1934	112½	112½	112½
Seaboard Air Line 4s, 1950	65	65½	65½
Seaboard Air Line 5s, 10-year, 1911	96	96½	96½
Seaboard Air Line 5s, 3-year	95½	95½	95½
South Bound 5s, 1941	106½	106½	106½
Southern Railway Con. 5s, 1941	111½	112	112
Suffolk & Carolina 5s, 1952	89	89	89
Virginia Midland 4th, 1921	107	107½	107½
Virginia Midland 5s, G. M.	107	107	107
Western Maryland 4s, 1952	85	85	85
West Va. Cent. 1st 6s, 1911	102½	102½	102½
W.L. Col. & Aug. 6s, 1910	102	102	102
Wilmington & Weld. Gold 5s, 1935	112	112	112

Street Railway Bonds.	Par.	Bid.	Asked.
Anacostia J. Potomac 5s, 1949	102½	103	103
Anacostia & Potomac 5s, Gtd.	104½	105	105
Atlanta Con. Street Railway 5s	105	105	105
Augusta Railway & Elec. 5s, 1940	100	101	101
Balto. City Pass. 5s, 1911	101½	101½	101½
Balto. Sp. Pt. & C. 4½s	93	93	93
Balto. Trac. (N. B. Div.) 5s, 1912	113	115	115
Charleston Con. Elec. 5s, 1920	87½	87½	87½
City & Suburban 5s (Balto.), 1922	108	109	109
City & Suburban 5s (Wash.), 1948	103½	104	104
Lexington Railway 1st 5s, 1949	97½	97½	97½
Maryland Electric Railways 5s	98½	97½	97½
Metropolitan 5s (Wash.), 1925	110½	112	112
Norfolk Railway & Light 5s	96½	97	97
United Railways 1st 4s, 1949	84	84½	84½
United Railways Inc. 4s, 1949	51½	51½	51½
United Railways Funding 5s	78½	78½	78½

Miscellaneous Bonds.	Par.	Bid.	Asked.
Baltimore Electric 5s	86½	86½	86½
Consolidated Gas 6s, 1910	102	102½	102½
Consolidated Gas 5s, 1939	111½	112	112
Consolidated Gas 4½s	92½	93½	93½
Con. Gas, Elec. Lt. & P. 4½s	85½	85½	85½
G.-B.-S. Brewing 1st 4s	42	44	44
G.-B.-S. Brewing Inc. 4s	16½	16½	16½
Mt. Vernon-Woodby Cot. Duck 5s	77½	77½	77½
United Elec. Lt. & P. 4½s	93	94	94

SOUTHERN COTTON-MILL STOCKS.

Quotations Furnished by Hugh MacRae & Co., Wilmington, N. C., for Week Ending February 1.

	Bid.	Asked.
Abbeville Cotton Mills (S. C.)	75	75
Aiken Mfg. Co. (S. C.)	82	82
American Spinning Co. (S. C.)	145	145
Anderson Cotton Mills (S. C.)	59	60

Arkwright Mills (S. C.).....	100
Augusta Factory (Ga.).....	65
Avondale Mills (Ala.).....	115
Belton Mills (S. C.).....	115
Bibb Mfg. Co. (Ga.).....	115
Brandon Mills (S. C.).....	135
Cabarrus Cotton Mills (N. C.).....	130
Chadwick-Hoskins Mills Co. (N. C.).....	90
Chadwick-Hoskins Mills Co. (N. C.) Pfd.....	100
Chiquola Mfg. Co. (S. C.).....	128
Clifton Mfg. Co. (S. C.).....	100
Clifton Mfg. Co. (S. C.) Pfd.....	99
Clinton Cotton Mills (S. C.).....	120
Columbus Mfg. Co. (Ga.).....	120
Courtenay Mfg. Co. (S. C.).....	96
Dallas Mfg. Co. (Ala.).....	95
Darlington Mfg. Co. (S. C.).....	70
Drayton Mills (S. C.).....	100
Eagle & Phoenix Mills (Ga.).....	121
Easley Cotton Mills (S. C.).....	145
Enoree Mfg. Co. (S. C.).....	69
Enoree Mfg. Co. (S. C.) Pfd.....	73
Enterprise Mfg. Co. (S. C.).....	100
Exposition Cotton Mills (Ga.).....	82
Gaffney Mfg. Co. (S. C.).....	240
Gaffney Mfg. Co. (S. C.) Pfd.....	67
Gainesville Cotton Mills (Ga.).....	70
Granby Cot. Mills (S. C.) 1st Pfd.....	48
Graniteville Mfg. Co. (S. C.).....	155
Greenwood Cotton Mills (S. C.).....	150
Grendel Mills (S. C.).....	114
Henrietta Mills (N. C.).....	160
King Mfg. Co., John P. (Ga.).....	100
Lancaster Cotton Mills (S. C.).....	135
Lancaster Cot. Mills (S. C.) Pfd.....	91
Langley Mfg. Co. (S. C.).....	93
Laurens Cotton Mills (S. C.).....	142
Limestone Mills (S. C.).....	140
Lockhart Mills (S. C.).....	81
Lockhart Mills (S. C.) Pfd.....	96
Loray Mills (N. C.).....	90
Marlboro Cotton Mills (S. C.).....	75
Mayo Mills (N. C.).....	75 75 1/2
Mills Mfg. Co. (S. C.).....	105
Mills Mfg. Co. (S. C.) Pfd.....	109 109 1/2
Monaghan Mills (S. C.).....	110
Monarch Cotton Mills (S. C.).....	100
Newberry Cotton Mills (S. C.).....	140
Norris Cotton Mills (S. C.).....	115
Olympia Cot. Mills (S. C.) 1st Pfd.....	70
Orangeburg Mfg. Co. (S. C.) Pfd.....	90
Orr Cotton Mills (S. C.).....	105
Pacolet Mfg. Co. (S. C.).....	105
Pacolet Mfg. Co. (S. C.) Pfd.....	99
Pelzer Mfg. Co. (S. C.).....	160
Piedmont Mfg. Co. (S. C.).....	175
Poe Mfg. Co. (S. C.).....	130
Richland Cot. Mills (S. C.) Pfd.....	45
Raleigh Cotton Mills (N. C.).....	100
Roanoke Mills (N. C.).....	168
Saxon Mills (S. C.).....	125
Sibley Mfg. Co. (Ga.).....	62 1/2
Spartan Mills (S. C.).....	132
Springstein Mills (S. C.).....	100
Tucapau Mills (S. C.).....	200
Trion Mfg. Co. (Ga.).....	140
Union-Buffalo Mills (S. C.) 1st Pfd.....	58 1/2
Victor Mfg. Co. (S. C.).....	120
Warren Mfg. Co. (S. C.).....	90
Warren Mfg. Co. (S. C.) Pfd.....	93
Washington Mills (Va.).....	25
Washington Mills (Va.) Pfd.....	31
Whitney Mfg. Co. (S. C.).....	110
Whitney Mfg. Co. (S. C.) Pfd.....	140
Williamston Mills (S. C.).....	105
Wiscasset Mills (N. C.).....	125
Woodruff Cotton Mills (S. C.).....	122
Woodside Cotton Mills (S. C.) Pfd.....	95

Quotations Furnished by William S. Glenn, Broker, Spartanburg, S. C., for Week Ending February 1.

Abbeville Cotton Mills (S. C.).....	70
Aiken Mfg. Co. (S. C.).....	82
American Spinning Co. (S. C.).....	145
Anderson Cotton Mills (S. C.).....	57
Arcadia Mills (S. C.).....	92
Arkwright Cotton Mills (S. C.).....	100
Augusta Factory (Ga.).....	65
Avondale Mills (Ala.).....	110
Belton Mills (S. C.).....	116
Brandon Mills (S. C.).....	135
Cabarrus Cotton Mills (N. C.).....	120
Chadwick Mfg. Co. (N. C.) Pfd.....	103
Chiquola Mfg. Co. (S. C.).....	125
Clifton Mfg. Co. (S. C.).....	101
Clifton Mfg. Co. (S. C.) Pfd.....	99
Clinton Cotton Mills (S. C.).....	105
Columbus Mfg. Co. (Ga.).....	98
Courtenay Mfg. Co. (S. C.).....	97
Dallas Mfg. Co. (Ala.).....	95
Darlington Mfg. Co. (S. C.).....	70
Converse Co., D. E. (S. C.).....	112
Drayton Mills (S. C.).....	100
Eagle & Phoenix Mills (Ga.).....	120
Easley Cotton Mills (S. C.).....	145
Enoree Mfg. Co. (S. C.).....	69
Enoree Mfg. Co. (S. C.) Pfd.....	73
Enterprise Mfg. Co. (Ga.).....	82
Exposition Cotton Mills (Ga.).....	240
Gaffney Mfg. Co. (S. C.).....	67
Gainesville Cotton Mills (Ga.).....	55
Granby Cot. Mills (S. C.) 1st Pfd.....	45
Graniteville Mfg. Co. (S. C.).....	160
Greenwood Cotton Mills (S. C.).....	150
Grendel Mills (S. C.).....	114
Hartsville Cotton Mill (S. C.).....	125
Henrietta Mills (N. C.).....	160
Inman Mills (S. C.).....	105
Lancaster Cotton Mills (S. C.).....	110
Lancaster Cot. Mills (S. C.) Pfd.....	91
Langley Mfg. Co. (S. C.).....	91
Laurens Mills (S. C.).....	140
Limestone Mills (S. C.).....	141
Lockhart Mills (S. C.).....	81
Lockhart Mills (S. C.) Pfd.....	96
Loray Cotton Mills (N. C.) Pfd.....	90
Marlboro Cotton Mills (S. C.).....	80
Mills Mfg. Co. (S. C.).....	100
Molloy Mfg. Co. (S. C.).....	95
Monaghan Mills (S. C.).....	115
Monarch Cotton Mills (S. C.).....	100
Newberry Cotton Mills (S. C.).....	145
Ninety-Six Cotton Mills (S. C.).....	115
Norris Cotton Mills (S. C.).....	115
Odeff Mfg. Co. (N. C.).....	90
Olympia Cotton Mills (S. C.).....	68
Orr Cotton Mills (S. C.).....	104
Pacolet Mfg. Co. (S. C.).....	160
Pacolet Mfg. Co. (S. C.) Pfd.....	97
Pelzer Mfg. Co. (S. C.).....	168
Piedmont Mfg. Co. (S. C.).....	175
Poe Mfg. Co., F. W. (S. C.).....	125
Saxon Mills (S. C.).....	122
Sibley Mfg. Co. (Ga.).....	62
Spartan Mills (S. C.).....	130
Trion Mfg. Co. (Ga.).....	140
Tucapau Mills (S. C.).....	215
Union-Buffalo (S. C.) 1st Pfd.....	60
Victor Mfg. Co. (S. C.).....	122
Warren Mfg. Co. (S. C.).....	92

Warren Mfg. Co. (S. C.) Pfd.....	100
Washington Mills (Va.).....	25
Washington Mills (Va.) Pfd.....	31
Whitney Mfg. Co. (S. C.).....	110
Whitney Mfg. Co. (S. C.) Pfd.....	140
Wiscasset Mills (N. C.).....	125
Woodruff Cotton Mills (S. C.).....	124
Woodside Cotton Mills (S. C.).....	130
Watts Mills (S. C.).....	90
Williamston Mills (S. C.).....	104

President Stone's Letter.

The annual letter of President John T. Stone of the Maryland Casualty Co., which is published in the January number of "The Budget," a monthly paper issued by the corporation for the interest and advantage of its forces, is a timely document, embodying much valuable information concerning the casualty business during the last year, with seasonable comment thereon. This yearly letter by President Stone is a feature in casualty lines, and it is furthermore read with attention and interest by insurance men. He notes the especially gratifying statement that the company's business for 1908 displayed an increase in premium volume over 1907 of \$431,436. The total premiums written, less cancellations, return premiums and reinsurance, were \$3,501,862, and the total net earnings were \$488,989, while \$223,618 were added to surplus. The total assets of the company are \$4,403,765. The company's premium income for January, 1909, was \$76,088 larger than for January, 1908.

Bank Reports.

The Bank of Richmond at Richmond, Va., reports December 31, 1908, loans and discounts, \$2,879,490; cash on hand and in banks, \$2,009,336; capital stock, \$1,000,000; surplus and profits, \$481,824; deposits, \$4,003,770; total assets, \$5,511,591; John Skelton Williams, president; Frederick E. Nolting, first vice-president; T. K. Sands, vice-president and cashier; H. A. Williams, assistant cashier, and L. D. Crenshaw, Jr., trust officer.

New Corporations.

Alva, Okla.—Woods County Union Bank, capital \$15,000, granted charter; directors, G. Kletke, president; John Weibener, vice-president; F. H. Meyer, J. B. Atkinson, Gottlob Wiersig, Ernest Wamhoff, P. C. Burge.

Atlanta, Ga.—The Standard Life Insurance Co., capital \$200,000, has been chartered. Incorporators are J. O. Ross, David T. Howard, H. A. Rucker (collector of internal revenue), Lewis G. Watts, R. A. Holman, Thomas H. Slater, A. D. Howard, P. A. Chappelle, William Driskell and H. E. Perry of Atlanta, F. J. Wimberly of Gilmore, J. P. Davis and M. B. Morton of Athens, and Emmet J. Scott of Tuskegee, Ala. It is said the company is to be financed and operated by negroes.

Ballinger, Texas.—Organized: Farmers and Mechanics' State Bank; capital \$100,000; incorporators, R. R. Russell, San Antonio; William Bevins, Menardville; H. Giesecke, J. F. Currie, J. N. Adams, W. B. Ray, R. W. Bruce, W. E. Allen, G. G. Odum, T. S. Lankford, R. A. Risser, Jr., M. D. Chastain, J. Y. Pearce, W. A. Norman, Ballinger; J. F. Currie elected president; Joe Wilmet, cashier.

Beaumont, Texas.—The Commercial National Bank, capital \$150,000, has organized by electing directors thus: John C. Ward, president; George W. Carroll, vice-president; T. W. Garrett, active vice-president; F. M. Law, cashier; Rupert H. Cox, assistant cashier; J. Frank Keith, J. L. Keith, Joe E. Carroll, W. C. Gray, Sol E. Gordon and M. L. Hinchee.

Benarold, Texas.—George W. Riddle of Dallas, Texas, is reported to be promoting a plan to establish a bank at Benarold.

Bovina, Texas.—First State Bank, capital \$10,000, incorporated by L. Z. Lester,

D. O. Stallings, A. J. Oliver and others.

Brownsville, Texas.—Brownsville Bank & Trust Co. has begun business; capital \$60,000; W. W. Lastinger, president; E. A. McGary, cashier.

Calico Rock, Ark.—Bluff City Bank, which succeeds the Bank of Calico Rock, incorporated with \$10,000 capital; directors, Ed C. Parsons, president; J. W. Wilkinson, vice-president; A. M. Benbrook, cashier; D. C. Shaver, J. T. Garner, J. B. Baker.

Cappell, Texas.—Incorporated: First State Bank; capital \$10,000; incorporators, T. J. Harrison, H. B. Bennett and J. W. Harrison.

Castroville, Texas.—Reported that G. P. McCorkle of San Antonio will open a new bank.

Commerce, Texas.—The State Bank of Commerce is reported organized with E. E. Maloney, president; E. J. Phillips, vice-president, and P. E. Maloney, cashier.

Cottage Grove, Tenn.—Union Bank has begun business; capital \$20,000; J. F. Austin, president; W. J. Bete, vice-president, and C. B. Aden, cashier.

Crawford, Texas.—First State Bank incorporated; capital \$15,000; incorporators, J. M. Washam, C. A. Graves, Elmer Brown of Crawford, V. M. Washam, Grapevine.

Dallas, Texas.—The Trinity National Bank of Dallas has been approved; capital \$600,000. The organizers are J. Howard Audrey, 295 Main street; J. B. Wilson, A. Silberstein, R. H. Stewart, Guy Sumpter and Rhodes S. Baker.

Earle, Ark.—The branch of the Crittenden County Bank & Trust Co. has begun business; capital \$75,000; Albert Horner, cashier.

Enston, Md.—Incorporated: Maryland Fire Insurance Co., capital \$100,000; surplus \$10,000; directors, Edwin G. Cover, president; M. B. Nichols, vice-president; John S. McDaniel, secretary; William Reddie, treasurer; Robert L. Kemp, auditor; J. Harry Covington, Wm. Mason Sheban, Frank G. Wrightson, William Anderson of Sudlersville, Md.; Zora H. Brinsfield, Eldorado, Md., and Paul Hofsinger of Ridgely, Md.

Fort Worth, Texas.—Texas State Bank, capital \$100,000, incorporated by W. L. Smallwood, Judge W. R. Smith, Felix P. Bath, A. August, Winfield Scott.

Frankfort, Ky.—People's State Bank has filed articles of incorporation; capital \$50,000; incorporators, O. H. Skiles of Shelby county, J. H. Halmhuber, W. V. Crossfield, R. A. Frazier of Frankfort and H. W. Richardson of Louisville. Mr. Skiles will be president and Mr. Halmhuber cashier.

Jackson, Miss.—Farmers' Union Bank, capital \$500,000, expects to begin business within 90 days; promoters, J. M. Bass, J. H. Myers, H. W. Bradshaw and G. W. Russell, all of whom have been named as officers and directors.

Laurel, Miss.—The Farmers and Traders' Bank, which has applied for a charter with \$50,000 capital, is reported to have appointed T. B. Honner, J. C. Coats and N. L. Pearson, Jr., to arrange for its permanent organization.

Little Rock, Ark.—The People's Health & Accident Insurance Co. has filed articles of incorporation; capital \$250,000; directors, Benjamin Cox, president; H. G. Pugh, first vice-president; George F. Rinderecht, second vice-president; B. C. Bain, secretary; F. E. Sutton, manager, and W. Y. McNutt treasurer. It is said the new company absorbs the People's Mutual Life, Accident & Health Insurance Co.

Lexington, Ky.—Prudential Savings Bank has filed articles of incorporation; capital \$16,000; incorporators, E. B. Grow, R. J. Wade and A. M. Baker.

Louisville, Ky.—Local negroes, it is reported, contemplate the establishment of a bank in Louisville, and Nannie H. Burroughs of Louisville is mentioned for cashier.

Louisville, Ky.—The Ramsey-O'Kain Company has been incorporated with \$50,000 capital to do a general insurance business. The stockholders are J. B. Ramsey of Sebrree, H. G. O'Kain of Nashville, Paul Roberts of Nashville, William R. Luke of Nashville, George S. Parks of Nashville, M. H. Thatcher and Hugh N. Leavell.

Mansfield, La.—Organized: Union State Bank, capital \$80,000, to take over the First National Bank of Mansfield and the Bank of De Soto; officers, J. C. Rives, president; C. E. Jenkins, first vice-president; N. W. Williams, second vice-president; Ben Johnson, cashier, and J. F. McFarland, assistant cashier.

Matthews, N. C.—A new bank is being organized.

Monticello, Ga.—The Farmers' National Bank has been authorized to begin business; capital \$30,000. E. H. Jordan is president; J. A. Kelly, vice-president, and D. N. Harvey, cashier. This is a conversion of the Farmers' Bank.

Nashville, Tenn.—The Capital Fire Insurance Co. of Nashville, a mutual concern, is reported being organized by C. Hoyte Bradford, C. S. McMillin, A. B. Mason and P. M. Estes of Nashville, and F. L. Fox of Knoxville, Tenn.

Newkirk, Okla.—The State Guaranty Bank of Newkirk, capital \$25,000, has been chartered with the following incorporators: J. S. Eastman, C. A. Eastman and P. S. Mason, all of Newkirk.

Newkirk, Okla.—The Farmers' State Bank of Newkirk, capital \$25,000, has been chartered by A. C. Slosson, M. H. Slosson and J. H. Coleman, all of Newkirk. It is a conversion of the Farmers' National Bank.

Oklahoma City, Okla.—Guaranty Bank, capital \$25,000, incorporated by F. C. Morey, W. S. Hicks, George E. Black and S. L. Dorsey.

Roanoke, Va.—Appalachian Insurance Co., capital \$25,000 to \$250,000, has been chartered by E. H. Kabler, president, Roanoke; J. C. Blasingame, vice-president, Richmond; H. M. Fox, secretary, Roanoke; A. L. Sibert, secretary.

Royse, Texas.—Texas State Bank incorporated with \$100,000 capital stock by W. H. Adams, H. T. Jones, S. T. Jones and C. E. Russell.

Sulphur, Okla.—Security State Bank, capital \$15,000, has been chartered, T. E. Moleck, president; E. H. B. Jenks, vice-president; C. T. Jenks, cashier.

Waverly, Tenn.—Citizens' National Bank has begun business; capital \$50,000; officers, A. P. McMurry, president; Messrs. B. R. Thomas and W. B. Ridings, vice-presidents; Mason Sanders, cashier; J. A. Slayden, assistant cashier.

Webster, N. C.—J. L. Broyles is cashier of the Tuckasee Bank, recently organized.

New Securities.

Americus, Ga.—The election to be held in Sumter county to vote on \$50,000 of 5 per cent. road-building bonds is to be held February 11.

Anadarko, Okla.—Voted: \$74,000 water-works, \$50,000 school, \$14,000 electric-light improvement, \$15,000 City Hall and fire department and \$7000 sewer-extension bonds.

Annapolis, Md.—Of the \$1,000,000 series B State road bonds, \$225,000 sold as follows: Safe Deposit & Trust Co., Baltimore, \$200,000 at 100.29; Mutual Fire Insurance Co., Belair, \$25,000 at 101.

Ardmore, Okla.—Sold subject to election next week, \$225,000 of 25-year bonds to Spitzer & Co. of Toledo.

Ashland, Ky.—John Bradley of Nashville, Tenn., is reported to have purchased at par \$21,518.77 of 6 per cent. paying bonds.

Atlanta, Ga.—Date for bond election is changed from April 7 to March 29; sewers, \$700,000; schools, \$300,000; water-works, \$500,000; total, \$1,500,000.

Auburn, Ala.—The water-works bonds recently voted amounted to \$12,000, and are 30-year 5 per cents.

Baltimore, Md.—The syndicate headed by James A. Hutchinson of Boston has purchased the \$500,000 of 3½ per cent. sewer bonds, upon which it had an option until February 1. Price, 92 and accrued interest.

Barton Heights, Va.—February 23 city will vote on \$15,000 water and sewer-completion bonds.

Beaumont, Texas.—Approved and registered: \$50,000 of 5 per cent. wharf bonds.

Beeville, Texas.—The Attorney-General has approved \$1300 of Bee county bridge-repair bonds.

Binghamton, P. O. Station C, Memphis, Tenn.—On February 11 an election is to be held to vote on \$25,000 of sewer, electric-light and water-works bonds.

Brookhaven, Miss.—John Nuveen & Co. of Chicago are reported to have purchased at private sale \$15,000 of 5½ per cent. 20-year school bonds. This issue, it is stated, takes the place of the \$15,000 awarded last fall to A. J. Hood & Co. of Detroit, which deal was never closed.

Central, S. C.—Reports state that the \$10,000 of 6 per cent. 20-year school-building bonds have been sold through the Robinson-Humphrey Company of Atlanta at par.

Charleston, S. C.—An election is proposed to vote on an issue of \$250,000 or \$300,000 of sewer-extension bonds.

Charleston, Miss.—Preparations reported to issue \$20,000 water-works bonds.

Charlotte, N. C.—The Board of Aldermen has authorized \$100,000 of bonds for improvements and current expenses.

Chattanooga, Tenn.—Bids will be received by W. R. Crabtree, Mayor, until noon February 4 for the following 6 per cent. 1-5-year paving bonds: \$2666.90, district No. 47; \$2749.75, district No. 38; \$1984.50, district No. 23, and \$1334.57, district No. 33.

Chattanooga, Tenn.—The MANUFACTURERS' RECORD is informed that bids will be received by S. M. Walker, county judge, until 10 A. M. March 2 for \$100,000 of 5 per cent. 20-year Hamilton county funding bonds.

Chattanooga, Tenn.—Application to be made to the Legislature for authority to issue \$125,000 funding bonds. W. R. Crabtree, Mayor.

Chillicothe, Mo.—Reported election soon on \$90,000 of 5 per cent. 20-year water-works bonds. Later an election on electric-light-plant bonds.

Claude, Texas.—Registered: \$2500 of 5 per cent. 15-20-year Armstrong county school district No. 5 bonds.

Colquitt, Ga.—Reports state that an election will soon be held to vote on \$15,000 of electric-light and water-extension bonds.

Columbia, Tenn.—The Northwestern Life Insurance Co., represented by G. A. Maddux of Nashville, has purchased \$175,000 of 4 per cent. 25-year Maury county funding bonds.

Conroe, Texas.—Approved: \$17,000 water-works bonds.

Crossville, Tenn.—February 27 an election in Cumberland county to vote on \$25,000 of Tennessee Northeastern Railroad aid bonds.

Dallas, Texas.—Reports state that an election is to be held in April to vote on \$550,000 of school district building bonds.

Denton, Texas.—Registered: \$12,500 of 5 per cent. 10-40-year sewer bonds.

Dothan, Ala.—An election recently held in Houston county to vote on \$100,000 of road bonds failed to carry.

Duncan, Okla.—The \$46,000 of water, City Hall and school bonds recently voted are reported sold.

Elgin, Texas.—City has voted \$30,000 water-works bonds.

Florence, S. C.—Chas. H. Coffin of Chicago is reported to have purchased at 100.52, for 6s, \$5000 of 30-year school-building bonds of Olanta school district No. 21.

Forest City, N. C.—Ordinance is to be introduced in the Legislature providing for election to vote on \$25,000 of water-works bonds.

Franklin, Ky.—MANUFACTURERS' RECORD is informed that P. E. Lewis and E. R. Biggs, committee, will receive bids until 11 o'clock March 1 for \$20,000 of 5 per cent. sewer bonds.

Grady, Ark.—Directors of the Linwood and Auburn levee district have decided to apply to the Legislature for authority to issue \$50,000 of additional bonds.

Greenville, Tenn.—Of the \$150,000 of 5 per cent. 10, 20 and 30-year road bonds authorized by the Green County Court, \$50,000 of 30-year securities have been sold at a premium of 5 per cent.

Guthrie, Okla.—The MANUFACTURERS' RECORD is informed that the Oklahoma Bond & Trust Co. has purchased during past week following 6 per cent. school district bonds: Carter county, \$2000 district 44, \$1200 district 53; McIntosh county, \$8000 district 14; Wagoner county, \$1200 district 3, \$1700 district 6, \$1600 district 23, \$1000 district 24; \$1200 district 29, \$1500 district 31, \$1000 district 36; Washington county, \$1500 district 3; Bryan county, \$4000 district 57.

Hampton, Va.—The \$100,000 of street and bridge bonds voted will run 40 years; interest not exceeding 5 per cent.

Havre de Grace, Md.—The city has sold the balance of the street-improvement bonds, excepting \$10,000 for sinking fund.

Hawkinsville, Ga.—C. W. Harris, city clerk, writes the MANUFACTURERS' RECORD that MacDonald, McCoy & Co. of Chicago have been awarded at \$15,675 and accrued interest the \$15,000 of electric-light bonds.

Hillsboro, Texas.—City Council reported petitioned to call an election to vote on following 4 per cent. 40-year bonds: City Hall and fire station, \$18,000; water-works and sewer improvement, \$6500; school sites and buildings, \$5000; public-square improvement, \$6000.

Lake Village, Ark.—The MANUFACTURERS' RECORD is informed that bids will be received by the Board of Improvement District No. 4, C. M. Matthews, chairman, until noon March 1 for \$25,000 of 6 per cent. 20-year water-works bonds.

Lawrenceville, Ga.—On February 10 an election is to be held in Gwinnett county to vote on \$50,000 of 5 per cent. 30-year road bonds.

Lula, Ga.—February 18 an election will be held to vote on \$5000 of 5 per cent. 10-year municipal bonds; J. A. McCubbins, Mayor.

Lyons, Ga.—An issue of \$20,000 of water and light bonds is reported sold.

Marlow, Okla.—An issue of \$8000 of 6 per cent. water-works bonds was approved at the recent special election. The \$8000 sewer bond issue was defeated.

Marshall, N. C.—It is contemplated to issue bonds for water extension, sewers and macadamized roads.

Memphis, Tenn.—John H. Watkins, 2 Wall street, New York, has been awarded at par \$1,000,000 of 4 per cent. water-works refunding bonds.

Memphis, Tenn.—Legislature has ap-

proved proposed \$1,000,000 bond issue for streets, bridges and sewers.

Memphis, Tenn.—Bids will be opened March 4 for \$250,000 of 4 per cent. improvement bonds.

Morgantown, W. Va.—An election is to be held April 1, it is reported, to vote on \$150,000 of 5 per cent. 5-30-year school district building bonds.

Muskogee, Okla.—The proposed issue of \$300,000 of school bonds was approved at the recent special election.

Nashville, Tenn.—A bill has been introduced in the Legislature, it is stated, providing for an election June 10 to vote on \$300,000 of high-school bonds.

Newbern, N. C.—McCoy & Co., Cincinnati, awarded at \$2850 premium \$50,000 of 5 per cent. 30-year street-improvement bonds.

Newton, Ala.—Voted: Bonds for water-works.

Norton, Va.—Resolution passed by Council calling for \$50,000 bond issue for sewers, streets and sidewalks.

Oceana, W. Va.—It is reported that an election is to be held in Wyoming county March 20 to vote on \$50,000 of bonds.

Okmulgee, Okla.—A. J. McMahon of Oklahoma City is reported to have been awarded at par, less \$850 for commission, the following 5 per cent. bonds: City Hall, \$15,000; sewers, \$70,000; water extension, \$15,000.

Oxford, Miss.—Bids will be received until 7 P. M. February 22 for \$25,000 of 5 per cent. 20-year bonds. R. S. Adams, Mayor.

Palestine, Texas.—The bond issue being considered by Anderson county amounts to \$500,000.

Park City, P. O. Knoxville, Tenn.—Application to be made to Legislature for authority to issue \$15,000 bonds to pay off indebtedness.

Parsons, W. Va.—The National Bank of Davis and the Miners and Merchants' Bank of Thomas were awarded at 100.625 the \$30,000 of 5 per cent. water and fire-department bonds.

Pawhuska, Okla.—Bids will be received until February 8 for \$10,000 of 5 per cent. 10-25-year gas-well bonds. W. J. Boone, city clerk.

Pittsboro, N. C.—Bill to be introduced in the Legislature for authority to hold election to vote on \$5000 street-improvement bonds.

Poteau, Okla.—Reported: In March election probably in LeFlore county to vote on \$150,000 courthouse and jail, \$100,000 bridge and \$100,000 road bonds.

Radford, Va.—R. J. Noel, W. T. Baldwin and R. O. Scott, finance committee, will receive bids for \$35,000 of 4 per cent. school-building bonds.

Red Bay, Ala.—Voted: \$5000 of school bonds.

Reidsville, N. C.—Reported: Election probably to vote on sewerage bonds.

Richmond, Va.—City proposes to issue sewer bonds; probably \$1,000,000.

Robert Lee, Texas.—The \$35,000 of Coke county road and bridge bonds to be voted on January 30 are 40-year 5 per cents.

Rock Hill, S. C.—The election to vote on \$250,000 of 5 per cent. bonds will be voted on February 11.

Rome, Ga.—The Grand Jury of Floyd county has recommended an issue of \$200,000 of 5 per cent. 10-35-year bonds for improving roads.

Rosebud, Texas.—Bids will be received until 4 P. M. February 1 by S. J. Ward, Mayor, for \$23,500 of 5 per cent. 10-40 water bonds.

Rosemary, S. C.—Reports state that the sale of the \$5000 of 6 per cent. 20-year school district bonds has been postponed indefinitely. The bonds were advertised for January 15.

San Antonio, Texas.—An issue of \$25,000 of bonds of improvement district No. 6 was recently voted.

Sanford, N. C.—A bill is to be introduced in the Legislature for authority to issue not more than \$12,000 of funding bonds; also for an election to vote on \$25,000 of sewer bonds.

San Angelo, Texas.—February 13 an election will be held to vote on \$32,000 of 5 per cent. 20-40-year school-building bonds.

Sanulpa, Okla.—Reported that \$65,000 water-works bonds have been sold.

Sebree, Ky.—Bids will be received by G. W. Covanah, city clerk, until March 1 for \$12,000 of 5 per cent. 20-year water-works bonds.

Seymour, Texas.—Reports state it is probable that about March 1 the \$40,000 of 4 per cent. 5-40-year water and sewer bonds will be offered for sale. They were voted last November.

Shepherdsville, Ky.—J. F. Combs, commissioner, will receive bids until noon February 27 for \$25,000 of 5 per cent. Bullitt county road bonds.

Spartanburg, S. C.—It is proposed to obtain authority from the Legislature to issue \$250,000 of bonds to fund the floating debt of Spartanburg county. This is in addition to the proposed issue of \$400,000 of bonds for good roads.

St. Joseph, Mo.—It is stated that Lee, Higginson & Co. of Boston have agreed to take the entire issue of \$400,000 of 4 per cent. bonds, which they were awarded last November.

Temple, Texas.—City Council has passed ordinance providing for election March 1 to vote on \$50,000 street-paving bonds.

Thomson, Ga.—John W. Dickey of Augusta is reported to have been awarded \$25,000 of 5 per cent. 30-year school bonds.

Triadelphia, W. Va.—Voted: \$43,000 of 5 per cent. 10-20-year school district bonds.

Union Springs, Ala.—Steiner Bros. of Birmingham are reported to have been awarded, at 104.60 for 5s, the \$100,000 of 30-year Bullock county road-improvement bonds.

Vinita, Okla.—Reports state that an election is to be held February 9 to vote on \$28,000 of bonds.

Wagoner, Okla.—City Loan & Trust Co. of Gainesville, representing Thos. J. Bolger Company of Chicago, has purchased \$40,000 of 5 per cent. 25-year sanitary sewer bonds; price 101.492.

Webb City, Mo.—An election is to be held February 9 to vote on \$90,000 of 5 per cent. 10-20-year school district high-school bonds.

Wheeling, W. Va.—Weil, Roth & Co. of Cincinnati have been awarded at par and accrued interest \$695,000 of 4 per cent. improvement bonds.

Woodward, Okla.—Election to be called to vote on \$75,000 school district building bonds.

At Chattanooga, Tenn., bids will be received until 10 A. M. March 2 for \$100,000 of 5 per cent. 20-year Hamilton county funding bonds. *Further particulars will be found in the advertising columns.*

At Franklin, Ky., bids will be received until 11 o'clock March 1 for \$20,000 of 5 per cent. sewer bonds. *Further particulars will be found in the advertising columns.*

At Lake Village, Ark., bids will be received until noon March 1 for \$25,000 of 6 per cent. 20-year water-works bonds. *Further particulars will be found in the advertising columns.*

[For Additional Financial News, See Page 88.]

